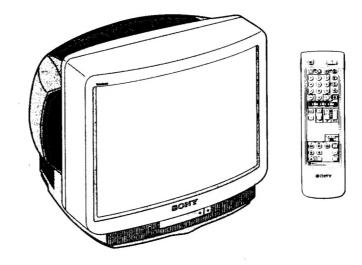
SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2901D	RM-833	AEP	SCC-G77B-A	KV-X2903E	RM-833	Spanish	SCC-G82BA-A
KV-X2901A	RM-833	Italian	SCC-G81B-A	KV-X2902L	RM-833	IRISH	SCC-G83B-A
KV-X2900B	RM-833	French	SCC-G85B-A	KV-X2902U	RM-833	UK	SCC-G87B-A
KV-X2901B	RM-833	French	SCC-G84B-A	KV-X2901K	RM-833	OIRT	SCC-G86A-A







ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K GERMAN Stereo		PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H, D/K	GERMAN Stereo	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, D/K L, I	GERMAN Stereo	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 I UHF:B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Irish	ı	NICAM Stereo	VHF A-C, D-J, VHF 21-69 CABLE CHANNELS S1-S20 HYPERBAND S21-S41	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
UK	ı	NICAM Stereo	UHF : B21-B69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	GERMAN Stereo	B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)

MODEL	AEP	Italian	French Text	French Non Text	Spanish	Irish	uĸ	OIRT
Power Consumption	108W	108W	108Wh	108W	108W	156W	156W	108W

SPECIFICATIONS

Picture Tube

Hi-Black Trinitron

Approx. 72 cm (29 inches)

(Approx. 68 cm picture measured

diagonally)

110° -deflection

Input/Output Terminals

[REAR]

Ö-1 21-pin Euro connector (CENELEC standard)

- inputs for audio and video signals

inputs for RGB

- outputs of TV video and audio signals

→2/ 2 21-pin Euro connector

- inputs for audio and video signals

- inputs for S video

- outputs for audio and video signals (selectable)

[FRONT]

€3Video input - phono jack

→3 Audio inputs - phono jacks

€33S video input 4-pin DIN

 Ω Headphone jacks: stereo minijack

Sound output 2 x 20W (Music power)

Power requirements 220 - 240V

Dimensions Approx. 656x566x518 mm

Weight Approx. 45kg

Supplied accessories RM-833 Remote Commander (1)

IEC designation R6 battery (1)

Other features NICAM, FASTEXT, TOPTEXT.

[RM-833]

Remote control system infrared control

Power requirements 1.5V dc

1 battery IEC designation

R6 (size AA)

Dimensions Approx. 65x225x21 mm (w/h/d)

Weight Approx. 157g (Not including batteries)

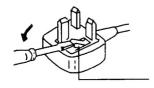
Design and specifications are subject to change without notice.

Model name	KV-X2901D	KV-X2901A	KV-X2900B	KV-X2901B	KV-X2903E	KV-X2902L	KV-X2902U	KV-X2901K
Pal Comb	OFF							
PIP	OFF							
RGB Priority	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
Woofer Box	OFF							
Scart 1	ON							
Scart 2	ON							
Front in (3)	ON							
Scart 4	OFF							
Projector	OFF							
AKB in 16:9 mode	ON							
Norm B/G	ON	ON	ON	ON	ON	OFF	OFF	011
Norm I	OFF	OFF	OFF	OFF	ON	ON	ON	0FF
Norm D/K	ON	OFF	OFF	OFF	OFF	OFF	OFF	0N
Norm AUS	OFF							
Norm L	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
Norm SAT	OFF							
Norm M	OFF							
Teletext	ON	ON	OFF	ON	ON	ON	ON	0N
Nicam Stereo	OFF	OFF	OFF	OFF	ON	ON	ON	0FF
Language Preset	Deutch	Italian	French	French	Spanish	English	English	OIRT

WARNING (KV-X2902L/KV-X2902U only)

The flexible mains lead is supplied connected to a B.S. 1363 fused plug having a fuse of 5 AMP capacity. Should the fuse need to be replaced, use a 5 AMP FUSE approved by ASTA to BS 1362, ie one that carries the mark.

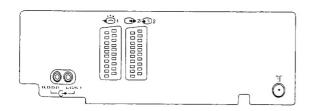
IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME. IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET. When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.

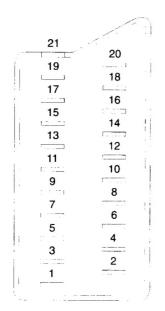


How to replace the fuse. Open the fuse compartment with the screwdriver blade and replace the fuse.

FUSE

21 pin connector (尚-1 → 2/ → 4)





Pin No.	1	2	4	Signal	Signal level
1				Audio output B	Standard level : 0.5V rms
	0	0	0	(right)	Output impedance :Less than 1kohm*
2	0	0	0	Audio input B	Standard level : 0.5V rms
	_		1	(right)	Output impedance :More than 10kohm*
3	0	0	0	Audio output A (left)	Standard level : 0.5V rms Output impedance :Less than 1kohm*
4	0	0	0	Ground (audio)	Carpet impedance . Less thair TROITI
5	0	0	O	Ground (blue)	
				Audio input A	Standard level : 0.5V rms
6	0	0	0	(left)	Output impedance :More than 10kohm*
7	0	•	•	Blue input	0.7 ± 3dB, 75 ohms, positive
8	0	0	0	Function select (AV control)	High state (9.5 - 12V): Part mode Low state (0 - 2V): TV mode Input impedance: More than 10k ohms Input capacitance: Less than 2nF
9	0	0	0	Ground (green)	
10	0	0	0	Open	
11	0	•	•	Green	Green signal: 0.7 ± 3dB, 75 ohms, positive
12	0	0	0	Open	
13	0	0	0	Ground (red)	
14	0	0	0	Ground(blanking)	
	0	_	_	Red input	0.7 ± 3dB, 75 ohms, positive
15	_	0	0	(S signal) croma input	0.3 ± 3dB, 75 ohms, positive
16	0	•	•	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 · 0.4V) Input impedance: 75ohms
17	0	0	0	Ground(video output)	
18	0	0	0	Ground(video input)	
19	0	0	0	Video output	1V ± 3dB,75ohms,positive sync:0.3V(-3+10dB)
200	0	_	-	Video input	$1V \pm 3$ dB,75ohms,positive sync:0.3 V (-3+10dB)
20	_	0	0	Video input Y (S signal)	1V ± 3dB,75ohms,positive sync:0.3/(-3+10dB)
21	0	0	0	Common ground (plug, sheild)	

○ Connected • Not Connected (open) *at 20Hz - 20lHz

Signal	Signal level
Ground	
Ground	
Y (S signal) input	1V ± 3dB 75 ohm , positive Sync. 0.3V -3/+10 dB
C (S signal) input	0.3V ± 3dB 75 ohm , positive Sync.
	Ground Ground Y (S signal) input



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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING!!

AN ISOLATING TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD, DUE TO A LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY SHADING AND MARKED ! ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLIMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENTION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÈ LORS DE TOUT DÈPANNAGE. LE CHÁSSIS DE CE RÈCEPTEUR EST DIRECTEMENT RACCORDÈ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÈCURITÈ !!

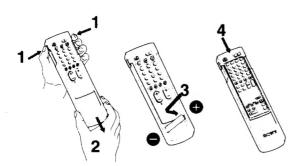
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE! SUR LES SCHÈMAS DE PRINCIPE, LES VUES EXPLOSÈES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÈCURITÉ DU FONCTIONNEMENT, NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÈRO DE PIÈCE EST INDIQUÈ DANS LE PRÈSENT MANUEL OU DANS DES SUPPLÈMENTS PUBLIÈS PAR SONY.

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Getting Started

Inserting the Battery Into the Remote Commander



Remove the cover.

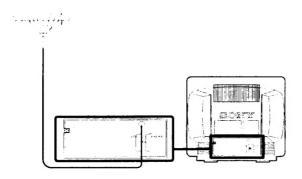
Check the correct polarity.

Refit the outside cover making sure that the Full Function side is visible.

About Battery Life

Under normal operation, a battery will last up to half a year.

Connecting the Aerial



Choosing a Language

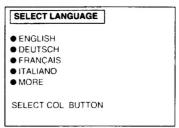
(See inside of front cover and back cover)

1 Depress ① A on the TV.
The TV turns on. If the standby indicator B on the TV is lit, press ○ 3 or any number button 4 on the Remote Commander.

Press MENU 7 on the Remote Commander.
The SELECT LANGUAGE screen appears.

MENU

Press one of the colour buttons 17 on the Remote Commander to select a language (Press the white button 17 to display other language alternatives). The SELECT LANGUAGE screen clears and all subsequent menus appear in the chosen language.



Note: From the second time when you turn on the TV, the MENU screen appears instead of the SELECT LANGUAGE screen. Press the yellow button **17** then press the white button **17** to redisplay the SELECT LANGUAGE screen.

Tuning in to Channels

You can tune in up to 60 channels to programme positions either automatically or manually.

auto tuning:

A single button press allows all receivable channels to be tuned. Use if

you are unfamiliar with the channel numbers of stations.

manual tuning:

Use if you are familiar with the channel numbers of stations.

Choose the more appropriate way for you.

Tuning in to Channels Automatically

There are two possibilities for auto tuning;

A. On the TV: hold down ► E on the front of the TV for 2 seconds

or

B. On the Remote Commander: as follows

1 Press MENU 7.

2 Press the white button 17.

3 Hold down the red button 17 for 2 seconds,

Note: Press the green button 17 to cancel.

Tuning in to Channels Manually

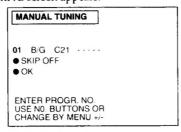
Press MENU 7. The MENU screen appears. MENU

Press the white button 17 to select PRESET. The PRESET screen appears.

PRESET AUTO TUNING MANUAL TUNING PROGR EXCHANGE EDIT PROGR NAME • FINE TUNE SELECT COL. BUTTON

Press the green button 17 to select MANUAL TUNING.

The MANUAL TUNING screen appears.



⚠ Press the number buttons 4 or MENU+/- 9 to select a programme position.

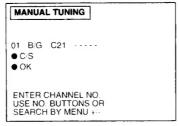
If you use the number buttons 4, enter a double-digit number. (e.g. for programme number 4, first press 0, then 4)

5 Press the green button 17.

MANUAL TUNING Note: Use MENU +/- 9 to select TV system. You can 01 B/G C21 ----alternatively select input sources which OK may be assigned to programme SELECT SYSTEM/INPUT positions. The CHANGE BY MENU + display changes as follows: $B/G \longleftrightarrow D/K \longleftrightarrow AV1 \longleftrightarrow RGB \longleftrightarrow AV2 \longleftrightarrow YC2 \longleftrightarrow AV3 \longleftrightarrow YC3$

6 Press the green button 17.

Note: If a video input source is selected in step 5, this is now stored. Refer to step 4 to tune other programme positions.



When you have slected B/G, press the red button [17] to select C (regular channel) or S (cable channel).

8 Press the number buttons 4 or MENU+/- 9 to select the channel number.

If you use the number buttons 4, enter a double-digit number. (e.g. for channel 23, first press 2, then 3)

Press the green button 17 to store.

Note: If you want to preset other channels, repeat steps

Press MENU 7 twice to return to the normal screen.

Note: You can skip unused programme positions when selecting programmes with the PROGR +/- buttons 18. Press the red button 17 to skip in step 4. However, the skipped programmes may still be called up when you use the number buttons.

Basic TV Operations

Turning the TV on and off

Turning on

Depress ① A on the TV.

Turning off temporarily Press O 10 on the Remote Commander.

The TV enters standby mode and the standby indicator **B** on the front of the TV lights up.

Turning on again Press \bigcirc 3, PROGR+/- 18, or one of the number buttons 4 on the Remote Commander.

Turning off completely Depress ① A on the TV.

Note: It is recommended to use ① **A** to turn off the TV. This could help you save energy.

Selecting TV Programmes Press PROGR+/- **18** or press number buttons **4**.

To select a double-digit number Press -/-- **5**, then the number buttons **4**.

Adjusting the Volume

Press 4+/- 19.

Muting the Sound

Press 🕸 🚺

To resume normal sound, press **4** 1 again.

Displaying the On-screen Indications

Press 114 once to display the on-screen indications. Press again to make the indications disappear.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can adjust or select the functions as follows

Press +/- D to adjust the volume.

Press P+/- C to select programme numbers or toturn

the TV on from the standby mode.

Press F to select the input source.

Press **E** to preset channels automatically.

Advanced TV Operations

Operating the Menu System

You can adjust picture and sound, preset channels to programme positions and utilise other convenient features by using the following menu system.

Pre	ss;	to;		
1	MENU 7	enter the MENU screen		
2	a colour button 17	select an item you want to change (The selected item is marked by a triangle.)		
3	MENU+/- 9 +	change (or adjust) the contents of the item		
4	MENU 7	return to the MENU screen		
5	MENU 7 again	return to the normal screen		
Pres	Press MENU 7 once or twice whenever you want to			

Note: When selecting menus, the picture becomes darker. If, however, an item in the PICTURE ADJUSTMENT menu is selected, normal level of TV picture is restored to allow the best adjustment.

Adjusting the Picture and Sound

return to the normal screen.

Although picture and sound are adjusted at the factory you can adjust them to suit your own taste.

1 Press MENU 7. The MENU screen appears.



- Press the red button 17 to select PICTURE or the green button 17 to select SOUND.
- **3** Press the respective colour button 17 to select an item.
- ⚠ Press MENU +/- 9 to adjust.
- Press MENU twice or wait until the menu displays disappear automatically to return to the normal screen.

PICTURE ADJUSTMENT

(First Page)

PICTURE ADJUSTMENT			
▶.))11101101101110111101110111111111111111		
• •	NATIONAL CONTROL OF THE CONTROL OF T		
•	INFORMATION CONTRACTOR		
• (1	101414441444441111111111111111111111111		
MOF	RE		
SE1 50	CT COL. BUTTON		
	ST BY MENU		

Press colour button	Effect
Red: For Picture ①	Less ——I-—— More
Green: For Colour 3	Less ——I—— More
Yellow: For Brightness ○	Darker ——I—— Brighter
Blue: For Sharpness ①	Softer ——I—— Sharper
White:	Next page of PICTURE ADJUSTMENT

PICTURE ADJUSTMENT

(Second Page)

PICTUF	E ADJUSTMI	ENT	
●NOISE	UR TONE NO REDUCE ON AT NORMAL		
	COL BUTTO		

Press colour button	Effect
Red: For Colour Tone	Normal -> Warm (reddish colour tone) -> Cool (blueish colour tone)
Green: For Noise Reduce	ON: Reduces picture noise (in case of low signal level) OFF: Normal setting
Yellow: For Format	Normal: Normal setting 16:9 Wide screen effect
Blue: For Hue control ぱね (only for NTSC video signals)	Reddish ——— Greenish
White:	Back to first page of PICTURE ADJUSTMENT

Note: Press → ◆ ● on the Remote Commander to reset to the factory preset levels for picture and sound.

SOUND ADJUSTMENT

Press colour button	Effect	
Red:		
For Volume	Less ——— More	
Green:		
For Treble §	Less —— More	
Yellow:		
For Bass 🤈	Less —— More	
Blue:		
For Balance	More left - more right	
White:	Next page of	
	SOUND ADJUSTMENT	

SOUND ADJUSTMENT

(Second Page)

SOUND ADJUSTMENT	
► SPACE SOUND OFF • MUSIC MODE OFF • STEREO	
● BACK	
SELECT COL. BUTTON CHANGE BY MENU +/-	

Press colour button	Effect
Red:	
For Space Sound	OFF: normal sound ON: for a special acoustic sound effect
Green:	
For Music Mode	OFF: normal sounds ON: when listening to music broadcast
Yellow: For Stereo:	Stereo -> Mono A (left channel) -> Mono B (right channel) -> Mono
White:	Back to first page of SOUND ADJUSTMENT

Note: Press → ◆ ◆ **8** on the Remote Commander to reset to the factory preset levels for picture and sound.

Using Special Features

With your TV you can utilise special features such as Parental Lock or Sleep Timer .

- 1 Press MENU 7.
 The MENU screen appears.
- 2 Press the yellow button 17 to select FEATURES.
- 3 Press the respective colour button 17 to select an item.
- 4 Press MENU +/- 9 to change.
- **5** Press MENU twice or wait until the menu displays disappear automatically to return to the normal screen.

FEATURES ► SLEEP TIMER OFF ● PARENTAL LOCK OFF ● TV BUTTON LOCK OFF ● DEMO MODE ● LANGUAGE SELECT COL. BUTTON CHANGE BY MENU +/-

Press colour button	Effect
Red:	
For Sleep Timer	OFF -> 0:30 -> 1:00 -> 1:30 -> 2:00
(Automatic	(hours) After the selected time the TV set
switch off	switches itself automatically into
function)	standby mode.
Green:	
For Parental Lock	OFF: Normal setting
(For preventing	ON: The TV-channel you are
children from	watching is now blocked. In this way you can prevent undesirable
watching programmes	broadcasts from appearing on the
which you	screen.
consider	Serverin
unsuitable)	
Yellow	
For TV Button Lock	OFF: Normal setting
	ON: The buttons on the TV do not
	function anymore. (The Remote Commander still
	operates)
Blue:	
For Demo Mode	ON: A sequence of menu pictures
	is displayed.
	Press any button on the
	Remote Commander to stop the function.
White:	
For Language	The SELECT LANGUAGE screes
	appears.

Advanced Presetting **Functions**

Exchanging Programme Positions

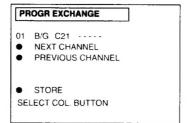
You can exchange the programme positions to a preferred order (example: exchange programme 09 (channel C21) with programme 15 (channel C24)).

Press MENU 7. The MENU screen appears.



Press the white button 17. The PRESET screen appears.

Press the yellow button 17. The PROGR EXCHANGE screen appears.



- Press the white button 17 repeatedly until the desired programme number (09) appears.
- Press the red or the green button 17 repeatedly until the desired channel number (C24) appears.
- Press the white button 17 to store. Now the exchange has been completed. Channel C24 is tuned in to programme 09 and channel C21 is tuned in to programme 15.
- Press MENU [7] twice to return to the normal screen.

Editing Programme Names

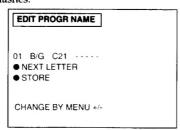
You can edit the programme names up to five letters.

Press MENU 7. The MENU screen appears.



Press the white button 17. The PRESET screen appears.

Press the blue button 17. The EDIT PROGR NAME screen appears. The first character flashes.



⚠ Press MENU+/- 9 to edit the first letter. The first letter changes as follows;

B ← · · · ← Z ← 0 ← 1 ← · · · ← 9 ← "–" (space)

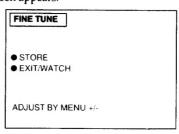
- Press the red button 17 to move to the next letter.
- Repeat steps 4 to 5, until the fifth letter is chosen.
- Press the green button 17.

The programme name is stored, and the normal screen appears. To edit another programme name, repeat steps 1 to 7.

Fine Tuning

You can adjust the receiving condition by the FINE TUNE function.

- Press MENU 7. The MENU screen appears.
- Press the white button 17. The PRESET screen appears.
- Press the white button 17 again. The FINE TUNE screen appears



- 1 Press MENU+/- 9 to adjust the receiving condition.
- Press the red button 17 to store the adjustment, or press the green button 17 not to store.

Then the normal screen appears. If you have pressed the green button, the fine tuned condition is cancelled once you choose another programme.

Tuning in to a Channel Temporarily

You can tune in to a channel temporarily, even when it has not been preset.

Press C 16 on the Remote Commander. For cable

channels, press C 16 twice.
The indicaton "C" ("S" for cable channels) appears on the screen.

Enter a double-digit channel number using the number buttons (e.g. for channel 23, first press 2, then 3).

The channel appears. However, the channel is not stored.

Teletext Operation

TV stations broadcast teletext programmes via the TV channels. For basic operation of teletext, use the simple side of the Remote Commander. For the advanced features of teletext, use the buttons indicated in green on the full function side of the Remote Commander.

Basic Teletext Operation

Switching Teletext on and off

1 Select the channel which carries the teletext service you wish to view.

2 Press 11 to display Teletext.

If no teletext signal is broadcast, the indication P100 is displayed on a black screen.



3 Input three digits for the page number using the number buttons 4.

The numbers are displayed on the screen and the requested page appears in a few seconds.

Note: If you make a mistake, type in any three digits, then re-enter the correct page number.

4 Press 3 to return to the TV mode.

Note: To change the teletext channels. First press 3 to return to the TV mode, then repeat steps 1 to 3.

Note: If the signal of a TV channel is weak, teletext errors

may occur.

Advanced Teletext Operation

Using Fastext

With Fastext you can access pages with one button press. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons 6 on the Remote Commander.

Press the corresponding colour button **6** on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed in a few seconds.

Requesting the Index page

Press 11. The Index page appears.

Accessing the next or preceding page

Press (PAGE +) or (PAGE -) (18). The next or the preceding page appears on the screen.

Superimposing the teletext display on the TV picture

Press (a) 11 once if you are in text mode or press (b) 11 twice if in TV mode.

To return to the normal teletext display press (11 again.



Preventing a teletext page from being updated or changed

Press (HOLD) 2. The HOLD symbol () appears on the screen and the selected subpage is held until you press [11] to cancel.

Enlarging the teletext display

Press (*) 13 once to enlarge the upper half. Press twice to enlarge the lower half. Press again to restore the normal display.





Revealing concealed information (e.g. answers to a quiz)
Press ① (REVEAL) 14. The information is revealed. Press
② 14 again to conceal the information.

Watching TV while waiting for a requested page to be displayed

1 Request a new teletext page.

? Press X (TEXT CL) 12.

The TV programme is displayed and the symbol is displayed at the top of the page.

Note: When the requested page is available the page number is displayed at the top of the screen.

? Press 🗐 🚺 to view the page.

Note: To cancel the request

Using the Favourite Page system

You can store up to four of your favourite teletext pages per programme with the help of the Favourite page system. In this way you have quick access to the pages you watch frequently.

Storing the Favourite Pages

- 1 Select the page you would like to store using the number buttons 4.
- 2 Press ↔ 15 twice.
 The colour prompts at the bottom of the screen flash.
- Press any of the colour buttons 6 on the Remote Commander to store the selected page.

 The page is now stored on this button.

Repeat steps 1 to 3 for the other 3 pages available.

Displaying the Favourite pages

1 Press + 15.

2 Press the colour button 6 corresponding to the colour prompt onto which the desired page is stored. The page is requested. (It may take a few seconds to be received).

Note: Step 1 must be taken before every favourite page selection, otherwise the normal Fastext facility operates.

Using the Time Function in the TV mode

Press ② 12 to request the time. Press again to cancel the request.

Note: This function is available only when teletext is broadcast.

Connecting Other Equipment

You can connect optional audio/video equipment to this TV such as VCRs, video disc players, cameras or stereo systems.

Connector	Acceptable input signal	Available output signal
5 1 M (AV1/RGB)	Audio/video and RGB signal	Audio/video signal from TV Tuner
(AV2) (YC2)	Audio/video and S video signal	Audio/video signal from selected source
-3 / -3 GH (AV3)	Audio/video signal and	No outputs
-€3/-€93 G [] (YC3)	Audio/S video signal	

To watch a video input picture, press 2 until the desired video input appears.

To return to the normal TV picture, press 2

repeatedly or press 3.

Note: If you have a decoder, connect it to - ○1 M.

Connecting a VCR Using the TV Aerial Terminal

Connect the aerial output of the VCR to the aerial terminal $\boxed{\mathbf{K}}$ of the TV. It is recommended to tune in the VCR signal to programme number "0". For details, see "Tuning in to Channels Manually" on page 18.

Note: S video input (Y/C input) L Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals.

Separating the Y and C signals prevents them from interfering with each other and therefore improves the picture quality (especially luminance). This TV is equipped with 2 video input terminals through which these signals can be

input directly.

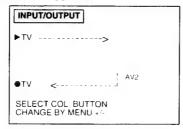
Checking and Selecting the Input and Output Sources Using the Menu

You can display a menu screen to see which input and output source are selected. You can also change the selection using this menu.

Checking the Input and Output Sources

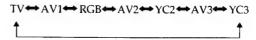
1 Press MENU 7.
The MENU screen appears

Press the blue button 17 to select INPUT/OUTPUT. The INPUT/OUTPUT screen appears.



Selecting an Input Signal

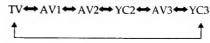
Press the red button 17 to select INPUT. Press MENU +/9 to select the desired input source.
You can select among the following sources:



Selecting an Output Signal

The + 2 /- 2 connector \fbox{L} outputs the source input from the other connectors. Press the green button $\fbox{17}$ to select OUTPUT. Press MENU +/- $\fbox{9}$ to select the desired output source.

You can select among the following sources:



Note: Press MENU **7** twice or wait until the menu displays disappear automatically to return to the normal screen.

Remote Control of Other Sony Equipment

You can use the TV Remote Commander to control most Sony remote-controlled video equipment such as: Beta, 8mm or VHS VCRs or video disc players.

Tuning the Remote Commander to the equipment

1 Set the VTR 1/2/3 MDP selector 20 according to the equipment you want to control:

VTR 1: Beta or VCR VTR 2: 8mm VCR VTR 3: VHS VCR MDP: Video Disc Player

2 Use the buttons 21 to operate the additional equipment.

Note: If your video equipment is furnished with a COMMAND MODE selector: set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander.

Note: If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

Note: When you use the ● (record) button, make sure to press this button and the one to the right of it simultaneously.

Using Headphones

You can utilise headphones. Connect them to the headphone jack \boxed{J} , then the sound from the speakers goes off.

Note: You can't control the sound adjustment except for volume.

For your information

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

No picture (screen is dark), no sound

• Plug the TV in.

• Press ① 🛕 on the TV. (If the standby indicator 🖪 is lit, press ○ 3 or any number button 4 on the Remote Commander.)

· Check if the selected video source is on.

• Turn the TV off for three or four seconds and then turn it on again using ① A

Poor or no picture (screen is dark), but good sound

• Press MENU $\boxed{7}$ to enter the MENU screen, and press the red button $\boxed{17}$, then adjust \odot and \circ .

Good picture but no sound

• Press 🚄 + 🔟

No colour for colour programmes

• Press MENU 7 to enter the MENU screen, and press the red button 17, then adjust 3.

Remote Commander does not function

· Replace the battery.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

Specifications

Television system

B/G/H, D/K

Colour system

PAL, SECAM

NTSC 3.58 (video input only) NTSC 4.43 (video input only)

Channel coverage

See "Receivable Channels and

Channel Displays"

Picture tube

KV-X2501:

Hi-Black Trinitron Approx. 63cm (25 inches) (Approx. 60cm picture measured

diagonally) 110° deflection KV-X2901:

Hi-Black Trinitron Approx. 72cm (29 inches) (Approx. 68cm picture measured

diagonally) 110° deflection

Terminals Rear

- 1 21-pin Euro connector (CENELEC standard) - inputs for audio and video

- inputs for RGB

(selectable)

- outputs of TV video and audio →2/-S2 21-pin Euro connector - inputs for audio and video - inputs for S video - outputs for audio and video

3 Video input-phono jack → 3 Audio input-phono jacks - S3 S video input-4-pin DIN ∩ Headphone jack: stereo mini jack

Sound output

2x20W music power

Power consumption KV-X2501: 99W

KV-X2901: 108W

Dimension (WxHxD) KV-X2501

Approx. 575x500x487mm

KV-X2901

Approx. 656x566x518mm

Weight

KV-X2501: Approx 33kg KV-X2901: Approx 45kg

Supplied accessories

Remote Commander RM-833,

Battery R6

Other features

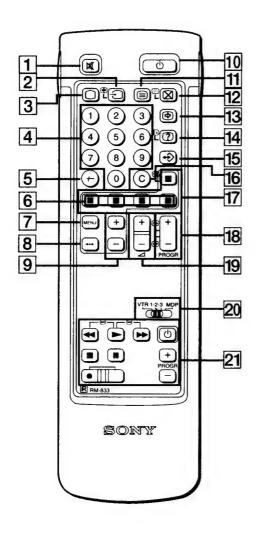
Fastext/Toptext

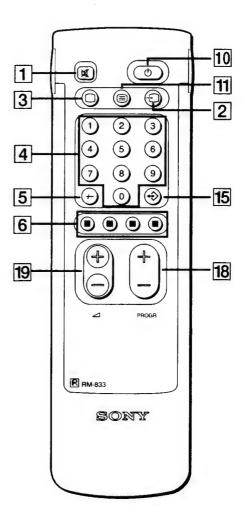
Receivable Channels and Channel Displays

TV System	Receivable Channels	Channel Displays
B/G/H	E2, E3 E12	C02, C03 C12
	E21, E22 E69	C21, C22 C69
Cable TV(1)	S1, S2 S41	S01, S02 S41
Cable TV(2)	S01, S02 S05	S42, S43 S46
	M1, M2 M10	S01, S02 S10
	U1, U2U10	S11, S12 S20
ITALIA	A, B H	C13, C14 C20
	H1, H2	C11, C12
D/K	R01, R02 R12	C01, C02 C12
	R21, R22 R69	C21, C22C69

Design and specifications are subject to change without notice.

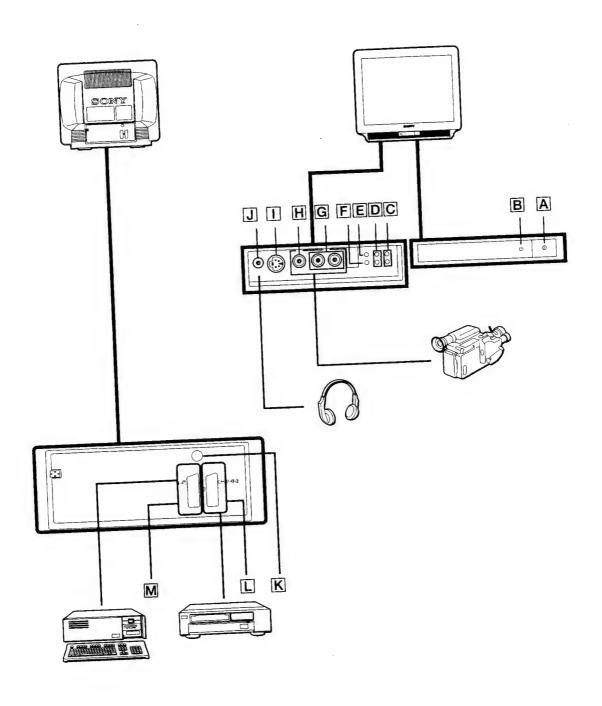
Front





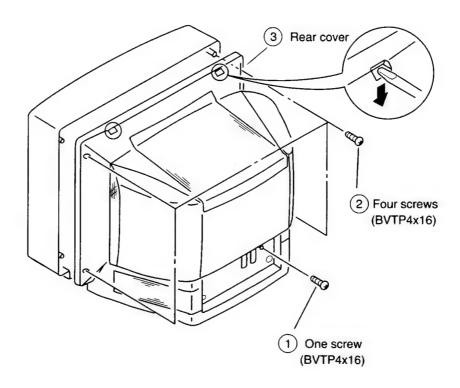
Full-Function Side

Simple Side

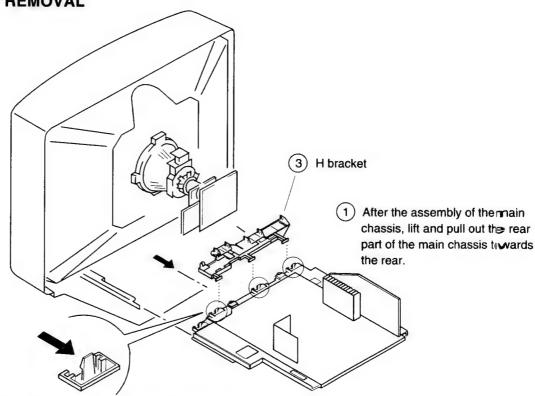


SECTION 2 DISASSEMBLY

2-1. REAR COVER REMOVAL

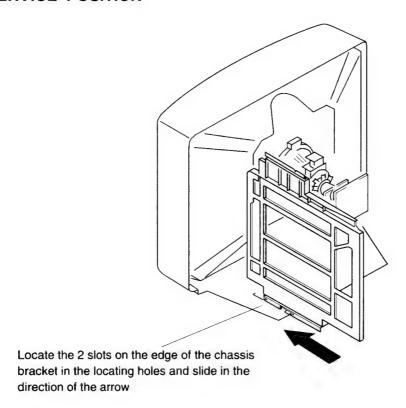


2-2. CHASSIS ASSY REMOVAL



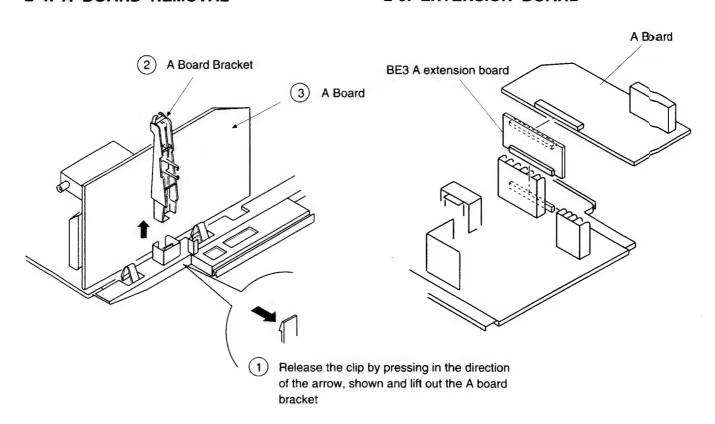
2 Push the three claws of the main chassis in the direction of the arrow and remove the H bracket upwards.

2-3. SERVICE POSITION

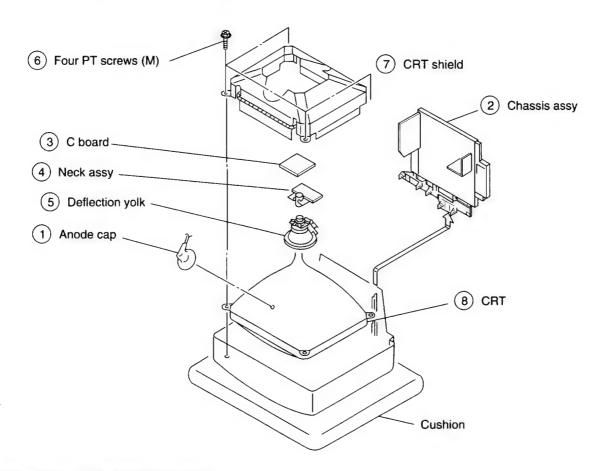


2-4. A BOARD REMOVAL

2-5. EXTENSION BOARD



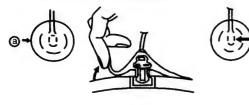
2-6. PICTURE TUBE REMOVAL



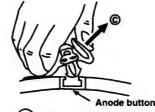
REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

* REMOVING PROCEDURES.



- 1) Turn up one side of the rubber cap in the direction indicated by the arrow (a)
- 2) Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b)



When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ©

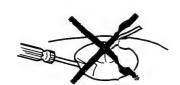
HOW TO HANDLE AN ANODE-CAP

- ① Don't damage the surface of anode-cap with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!

A metal fitting called as shatter-hook terminal is built into the rubber.

3 Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or damage the rubber.





SECTION 3 SET - UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to these settings:

Contrast	80%	(or remote control
	norma	al)
A Brightness	50%	

- Carry out the following adjustments in this order:
- 1. Beam landing
- 2. Convergence
- 3. Focus
- 4. White balance

Note: Testing equipment required.

- 1. Color bar/pattern generator
- 2. Degausser
- 3. DC power supply
- 4. Digital multimeter
- 5. Oscilloscope

Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

- Input the white signal with the pattern generator.
 CONTRAST BRIGHTNESS normal
- 2. Position neck assy as shown in Fig.3-2.
- 3. Set the pattern generator raster signal to red.
- 4. Move the deflection yoke forward and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig. 3-1 3-3)
- 5. Move the deflection yoke forward and adjust so that the entire screen becomes red. (See Fig. 3-1)
- 6. Switch the raster signal to blue, then to green and verify the condition.
- 7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
- 8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig. 3-4)

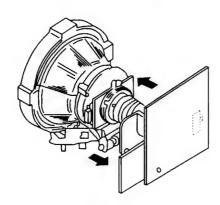
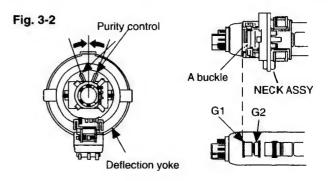
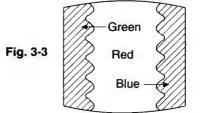
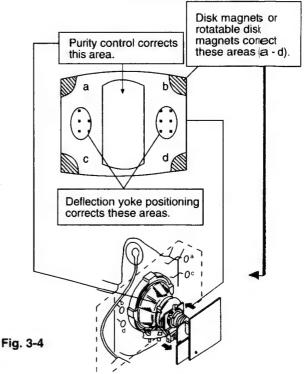


Fig. 3-1





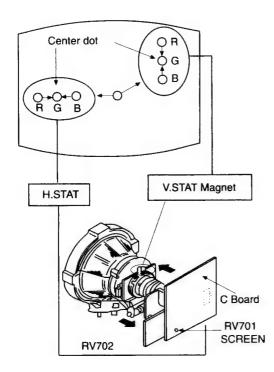


3-2. CONVERGENCE

Preparation:

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide a dot pattern.

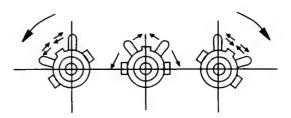
(1) Horizontal and vertical static convergence



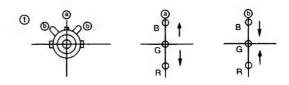
- 1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
- 2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
- If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
 (In this case, the H.STAT variable resistor and the

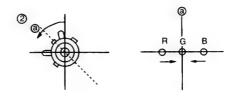
V.STAT magnet influence each other)

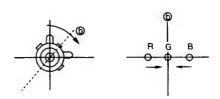
 Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.

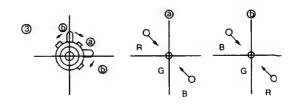


4. If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green, and blue points move as shown below.

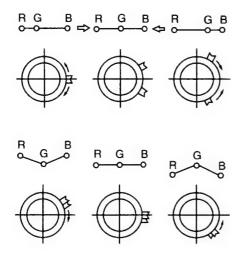




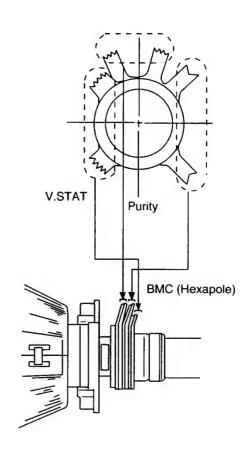




Operation of BMC (Hexapole) Magnet



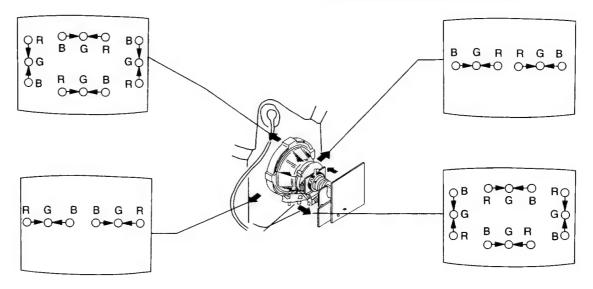
 The respective dot position resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
 Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of the screen (by moving the dots in the horizontal direction).



(2) Dynamic convergence adjustment.

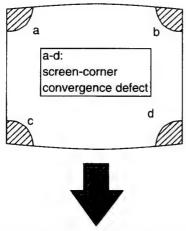
Preparation:

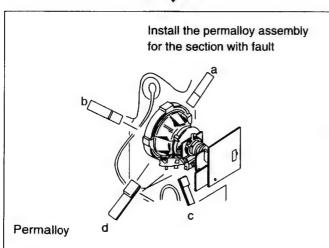
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
- 1. Slightly loosen the deflection yoke screws.
- 2. Remove the deflection yoke spacer.
- 3. Move the deflection yoke as shown in the figure below and optimize the convergence.
- 4. Tighten the deflection yoke screws.
- 5. Re-install the deflection yoke spacer.



(4) Screen corner convergence.

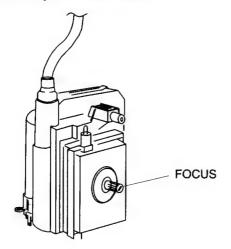
If you are unable to adjust the corner convergence properly, correct them with the use of permalloy assemblies.





3-3. Focus

Adjust the focus to optimize the screen.



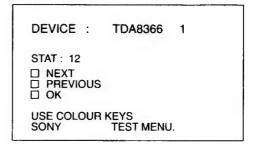
3-4. WHITE BALANCE

Screen G2 Setting

- 1. Input the dot signal from the pattern generator.
- 2. Set the picture brightness control to its lowest level.
- 3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
- While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

White balance adjustment

- 1. Receive an all-white signal.
- Enter into service mode. (Refer to the section 4
 "Electrical Adjustment" on how to enter service
 mode.)
- 3. Select TDA8366 1 on menu.



- 4. Press the White button on the Remote Commander to enter into the device Menu.
- 5. Press the Red button 10 times "Next" "Next" "Next" to select HWB RED, adjust to 040.
- Press the Red button to select HWB GREEN, adjust with the + and - menu buttons so that the white balance becomes optimum.
- Press the Red button to select HWB BLUE, adjust with the + and - menu buttons so that the white balance becomes optimum.
- 8. Press the TV button twice on the Remote Commander to store the data and return to TV operation.

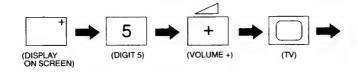
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander RM-833.

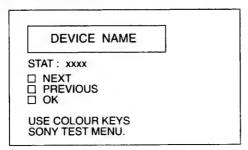
HOW TO ENTER INTO SERVICE MODE

- 1. Turn on the main power switch of the set and enter into standby mode.
- 2. Press the following sequence of buttons on the Remote Commander.

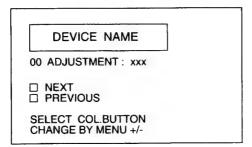


"TT" will appear in the top right corner of the screen. Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.



4. Press the Red (Next) and Green (Previous) buttons to select the device corresponding to the adjustment item from the table. Then press the White button (OK).



- 5. Press the Red (Next) or Green (previous) buttons to select the adjustment item. Then press the and buttons to change the data to comply with each standard.
- Turn off the power to quit the service mode when adjustments are completed.

Initial Conditions for setup of TDA8366, TDA6612 and SAA7283. (Stereo Models Only)

TDA8366 1	INIT VALUE	TDA8366 2	INIT VALUE
Hue	31	Interlace	00
H Shift	Adj	Sync Mode	00
H Size	Adj	Col Dec	00
Pin Amp	Adj	Vert Div	00
Corn Pin	Adj	Vid ID	00
Tilt	Adj	EHT Track	01
V.Linear	Adj	En V Grd	00
V.Size	Adj	Serv Blk	00
S.Corr	Adj	OVP Mode	00
V.Cent	Adj	Aspect R	00
HWB Red	Adj	Start Freq	00
HWB Green	Adj	Y/C Input	00
HWB Blue	Adj	PAL/NTSC	00
Peaking	8	Xtal PLL	00
Bright	32	Y Delay	07
Colour	32	RGB Blk	00
Picture	37	Noise Cor	00
AGC Set	00	Fast Blk	01
Srce Sel 1	00	AFC Wind	00
Srce Sel 2	00	IF Sensty	00
Time Con	03	Mod Std	00
Xtal Ind	03	Vid Mute	01
FF Freq	02		

TDA6612	INIT VALUE	TDA6612	INIT VALUE
MPX Per	00	Mute 2	01
Quasi St	00	C1/2LS	00
Bass Exp	00	C1/2KH	00
H Pulse	00	Mono	01
Matrix St	00	Scart	00
Bypass	00	Scart D	00
Vol L Sp	07	AM	00
Vol R Sp	07	SAA7283	INIT VALUE
Vol HP	00	Mon M1/M2	01
PII Sync	00	DM Select	01
Mute 3	01	SSWIT 123	07
Treble	08	Port 2	00
Bass	09	Mute Def	00
X Talk Adj	Adj	AMDIS	00
Mute 1	00	Е Мах	80
		E Min	01

4-2. TEST MODE 2:

Is available by pressing Test button twice, OSD 'TT' appears. The functions described below are available by pressing the two numbers. To release the Test Mode 2, press 0 twice, or switch the TV into Stand-by Mode.

00	switch Test Mode 2 off	
01	picture maximum	
02	picture minimum	
03	Volume 35%	
04	Volume 50%	
05	Volume 65%	
06	Volume 80%	
07	Ageing Condition (Volume min., Picture max., Brightness max.	
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)	
09	"Menu" Flag request	
10	Tenth entry is deleted	
11	dummy	
12	dummy .	
13	dummy	
14	Forced AV 16:9 detection on/off	
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)	
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM.	
17	Preset Label for AV Sources	
18	RGB Priority on/off	
19	Clear all preset labels	
20	Tenth entry is deleted	
21	Sub Contrast	
22	Sub Colour	
23	Sub Brightness	
24	Set destination = U RGB Priority = Off	
25	Set destination = D RGB Priority = Off	
26	Set destination = B RGB Priority = On	
27	Set destination = K RGB Priority = Off	
28	Set destination = L RGB Priority = Off	
29	Set destination = E RGB Priority = Off	
	Get destination - E Trob Frionty - On	

30	Tenth entry is deleted
31	Set Destination = A RGB Priority = On
32	dummy
33	Auto AGC
34	N/S Pin Adjust
35	Manual AGC Adjust
36	dummy
37	dummy
38	dummy
39	dummy
40	Tenth entry is deleted
41	Re-initialise NVM
42	Production use only
43	Initialise Geom Settings
44	Initialise all favorite pages = 100
45	Channel locks = off
46	IR Channel Pressetting Mode The channel pressetting can be done by a Special IR Transmitter (Ver 2 and above software only)
47	dummy
48	Set NVM testbyte to 44h
49	Erase the NVM Testbyte (this byte detects already stored NVM's) After selecting this function, switch TV Off and On -> the NVM will be preset by μ -Controller.

In Test Mode the Menu display is switchable by the Speaker-Off button.

Note: For Test Modes 41 - 49 it is necessary to ensure that the TV is set to Prog 59.

SUB BRIGHTNESS ADJUSTMENT

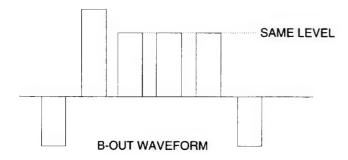
- 1. Input a Phillips pattern.
- 2. Enter into service mode and press 23.
- Adjust data so that 0-IRE of grey scale and CUT-OFF 20-IRE are only slightly visible on screen.

SUB CONTRAST ADJUSTMENT

- Input a video that contains a small 100% area on a Black Background.
- 2. Enter into service mode and press 01 to have PIC max followed by 21.
- Connect oscilloscope to pin (1) of CN703 (R OUT) and adjust HWB Red data of TDA8366 1 to obtain 2.3Vp-p.

SUB COLOR ADJUSTMENT

- 1. Input a PAL color bar signal.
- 2. Connect an oscilloscope to pin 3 of CN703 (B OUT) on the C board.
- 3. Enter into service mode and press 22.
- 4. Adjust data so that the right sides of the waveform are set to the same level.



STEREO SEPARATION ADJUSTMENT

- 1. Input a 1KHz stereo signal to the L-ch and a 400Hz stereo signal to the R-ch.
- Enter into service mode and select the "Test Menu" to be TDA6612.
- 3. Select the Stereo Xtalk Adjustment Menu, by using the Red (Next) and Green (Previous) buttons.
- 4. Monitor the Scart 1 L-channel output and adjust the data so that the R-channel sound is not detected in the L-channel.

I.F. COIL ADJUSTMENT (T101) - B/G, D/K, I AND L STANDARD FOR CONTINENTAL MODELS.

- Apply a 38.9MHz signal at 100dBuV to the input of SWF101.
- 2. Receive a channel so that the I.C. is selected for negative modulation.
- 3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

I.F. COIL ADJUSTMENT (T101) - I, STANDARD FOR U.K. MODELS.

- Apply a 39.5MHz signal at 100dBuV to the input of SWF101.
- 2. Receive a channel so that the I.C. is selected for negative modulation.
- 3. Measure the voltage at the AFT test point and adjust (T101) to obtain 2.4V +/- 0.2V.

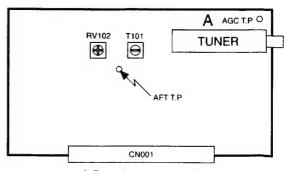
L, BAND 1 ADJUSTMENT (RV102) - L, STANDARD FOR FRENCH MODELS.

- Apply a 33.95MHz signal at 100dBuV to the input of SWF101.
- 2. Receive a channel so that the I.C. is selected for positive modulation and system L band 1.
- 3. Measure the voltage at the AFT test point and adjust (RV102) to obtain 2.4V +/- 0.2V.

Note: Only adjust RV102 after T101 has been correctly adjusted.

AGC ADJUSTMENT

- 1. Receive an off- air signal.
- 2. Enter the service mode, ("Test" "Test") and 35.
- 3. Adjust the data so that there is no snow or cross modulation visible on the screen.
- Change the receiving off-air channel, and confirm the above status.



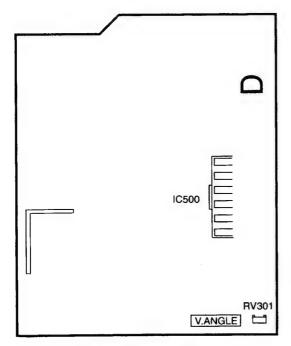
- A Board component side -

DEFLECTION SYSTEM ADJUSTMENT

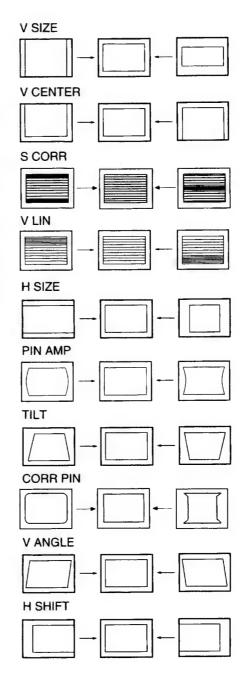
- 1. Enter into service mode.
- 2. Select and adjust each item in order to obtain the optimum image.

Item No	Adjustment item.	Data Amount
03	H SHIFT	ADJ.
04	H SIZE	ADJ.
05	PIN AMP	ADJ.
06	CORR PIN	ADJ.
07	TILT	ADJ.
08	V LINEAR	ADJ.
09	V SIZE	ADJ.
0A	S CORR	ADJ.
0B	V CENTER	ADJ.

Note: V ANGLE is adjusted by a Variable Resistor on the 'D' Board (RV301)



- D Board Component Side -



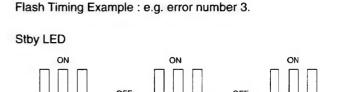
4-3. BE3 SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-3 chassis is triggered in 1 of 2 ways: -1: Bus busy or 2: Device failiure to respond to IIC. In the event of one of these situations arrising the software will first try to release the bus if busy (Failiure to do so will report with continous flashing LED) and then communicate with each device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the led (Series of flashes which must be counted) See Table 1., on fatal errors are reported with this method.

If a fatal error is found the set will simply stay in whichever state it was when the error occured, but if a non fatal error occurs the set will try to continue operation.

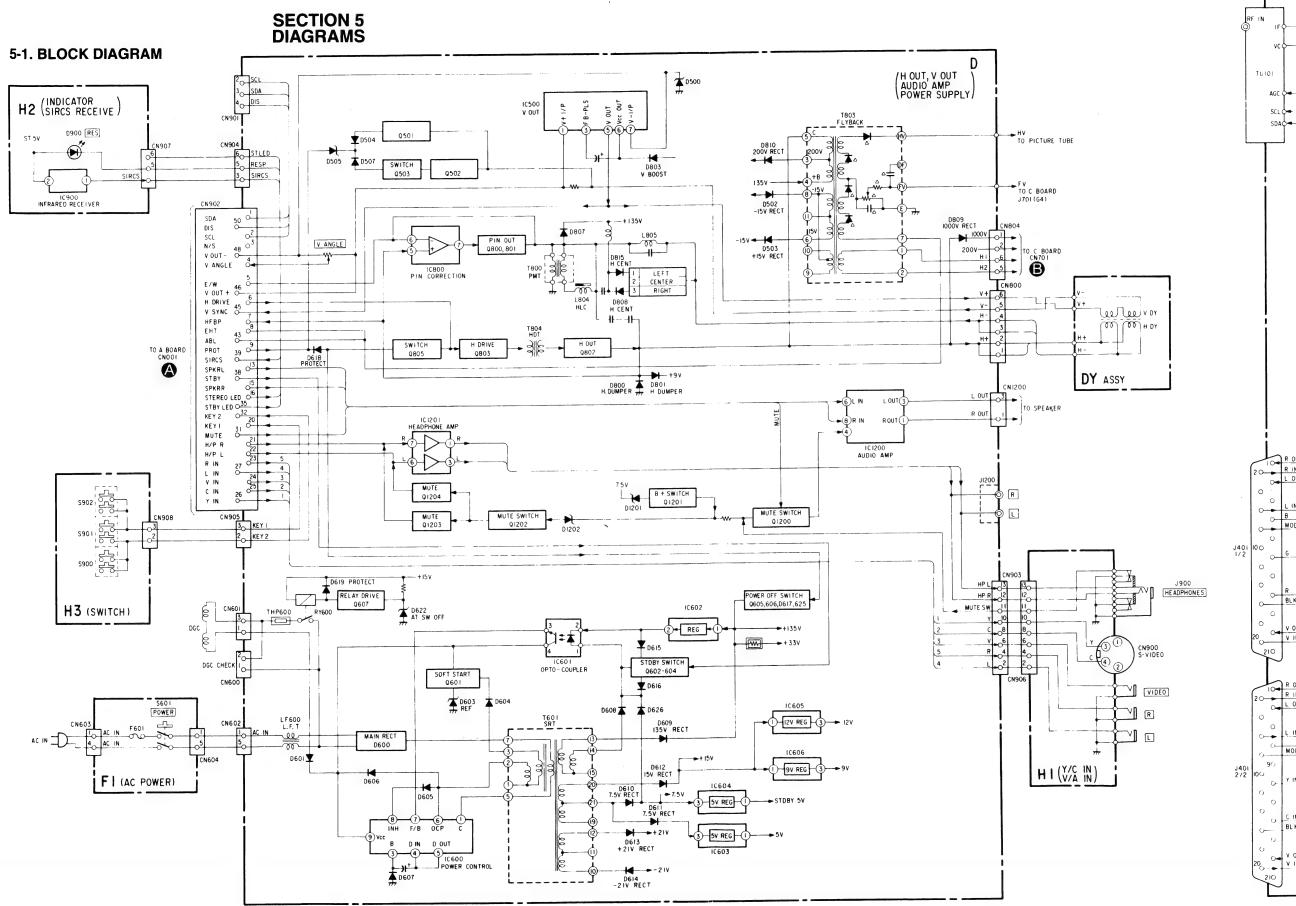
Table 1

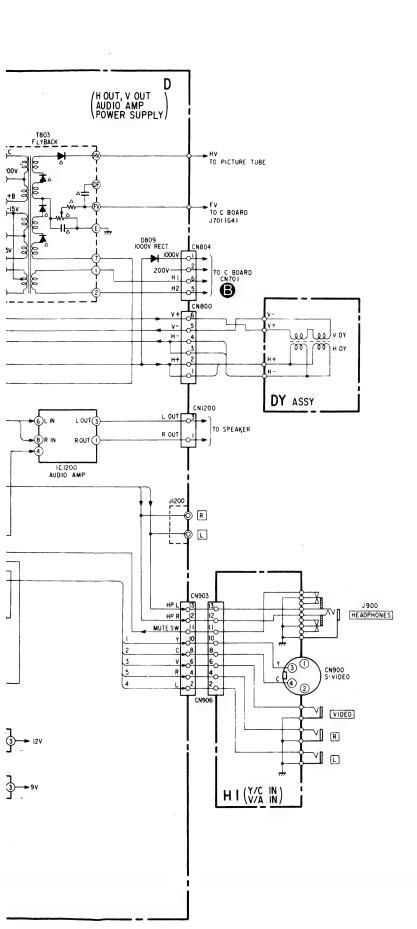
Device	LED Error Count	Fatal Error
NVM	29	٧
Teletext	10	
Jungle	11	1
Video_sw	12	
Tuner	13	1
Nicam	14	
Audio_cont	15	1

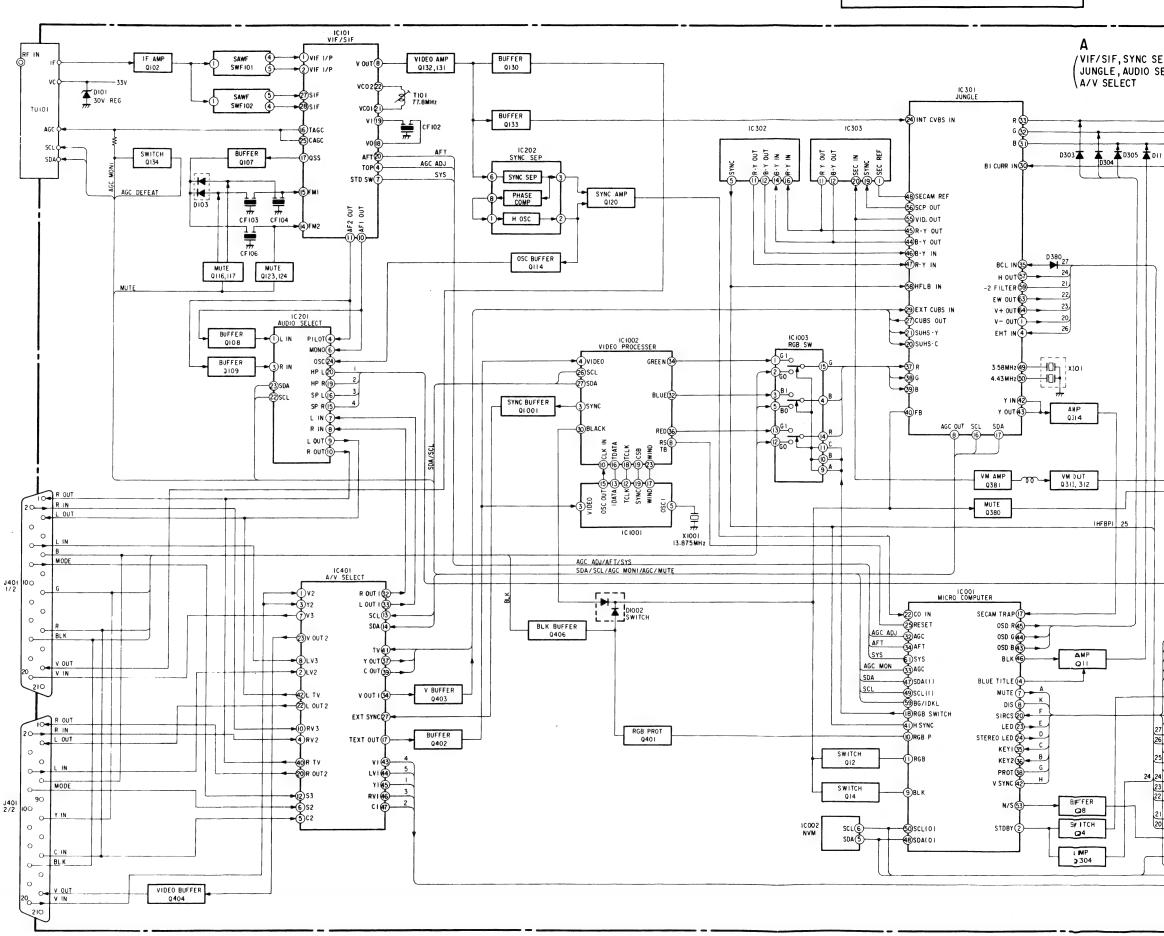


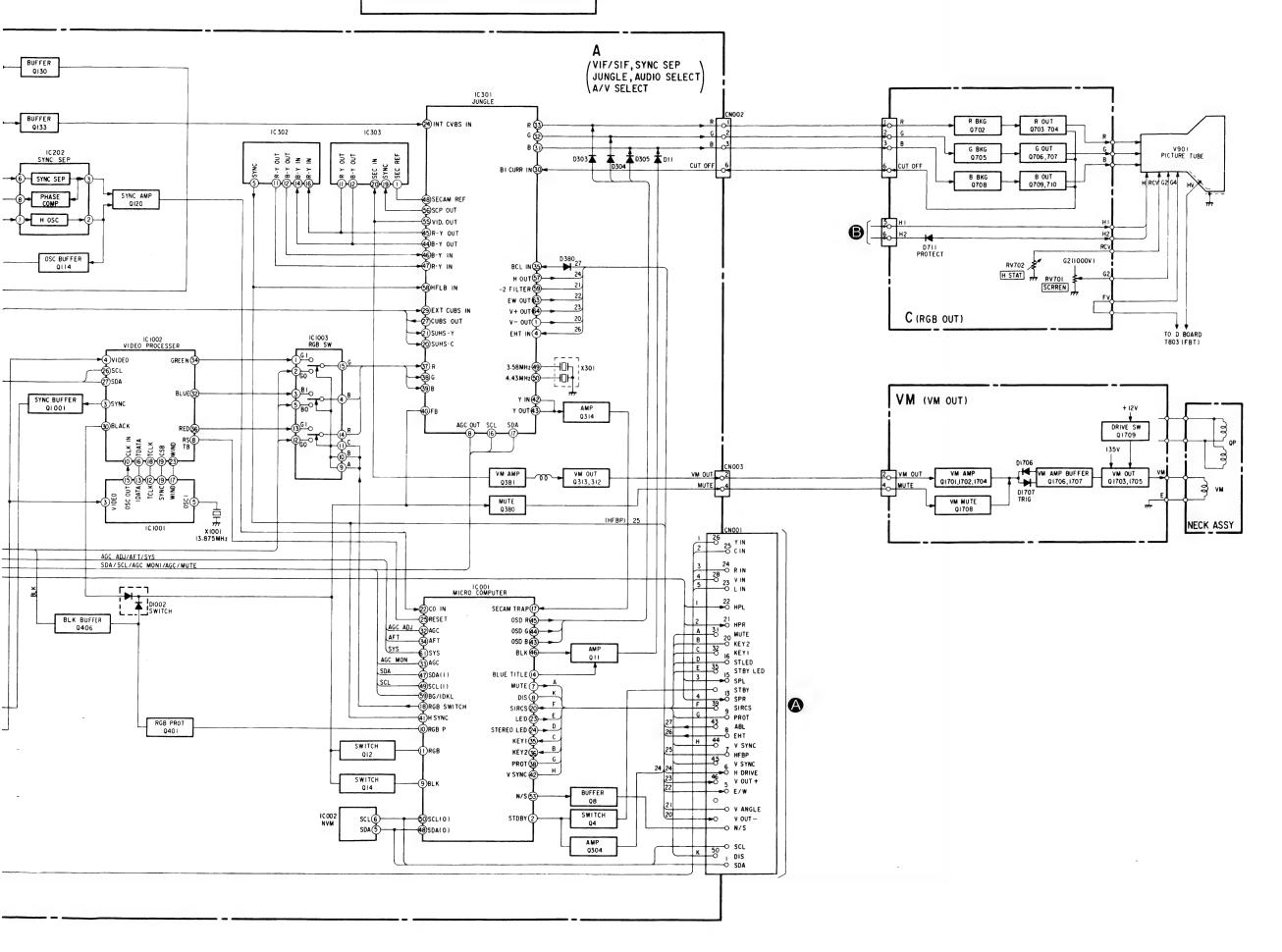
KV-X290

MEMO

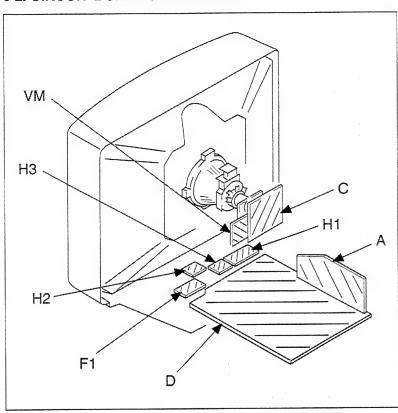








5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μ F unless otherwise noted. pF: μ μ F 50WV or less are not indicated except for electrolytic.
- Indication of resistance, which dose not have one for rating electrical power, is as follows.

Pitch: 5mm
Rating electrical power: 1/4W

- Chip resistor is in 1/10W.
- All resistors are in ohms. $k\,\Omega = 1000\,\Omega,\,M\,\Omega = 1000K\,\Omega$
- · + : nonflammable resistor.
- · fusible resistor.
- △ : internal component.
- · _____: panel designation or adjustment for repair.
- All variable and adjustable resistors have charactristic curve B, unless otherwise noted.
- · All voltages are in V.
- . Readings are taken with a 10M Ω digital multimeter.
- · Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- : B + bus.
- . = = : 8 bus.
- · signal path.(RF)
- · ___ : earth ground
- earth chassis بلر

Reference information RESISTOR RN : METAL FILM : SOLID RC : NONFLAMMABLE CARBON FPRD : NONFLAMMABLE FUSIBLE FUSE RS : NONFLAMMABLE METAL OXIDE : NONFLAMMABLE CEMENT RB : NONFLAMMABLE WIREWOUND RW : ADJUSTMENT RESISTOR LF-8L : MICRO INDUCTOR CAPACITOR TA : TANTALUM : STYROL : POLYPROPYLENE PT : MYLAR MPS : METALIZED POLYESTER MPP : METALIZED POLYPROPYLENE ALB : BIPOLAR : HIGH TEMPERATURE ALT

В

C

D

E

Н

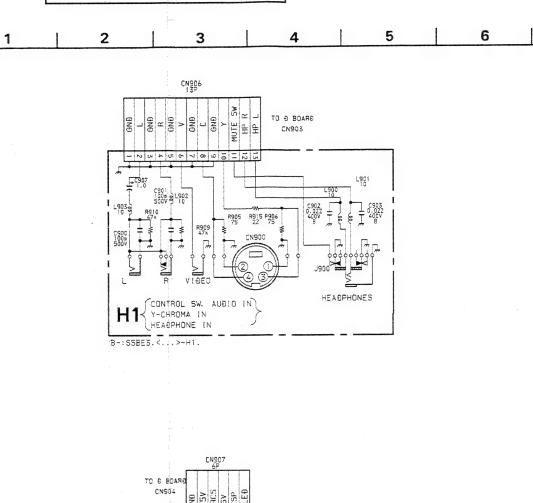
Note: The components identified by shading and mark

A are critical for safety. Replace only with part number specified.

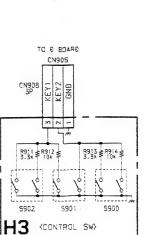
: HIGH RIPPLE

ALR

Note: Les composants identifiés par une trame et par une marque A sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.



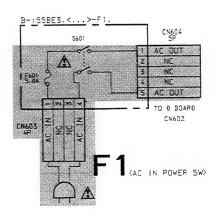
0901 SLR-54VR3



B-:SSBE3.<...>-H3.

H2 (SIRCS RECEIVE, INDICATOR)

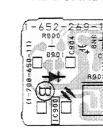
B-: SSBE3. <...>-H2



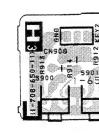




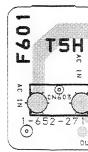




- H3 BOARD



- F1 BOARD



KV-X290

NOTE: The circuit in inspection or

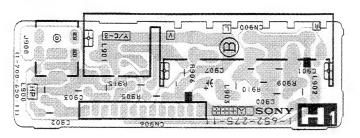
[CONTROL SW, AUDIO IN Y-CHROMA IN, HEADPHONE IN]

H2 SIRCS RECEIVE INDICATOR

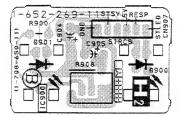
H3 [CONTROL SW] F1 [AC IN POWER SW]

HV OUT PIN OUT POWER SUPPLY

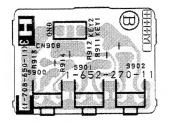
- H1 BOARD -



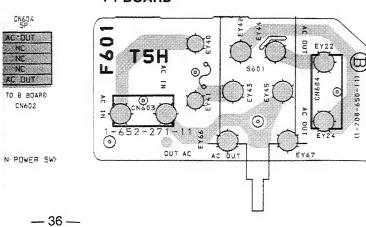
- H2 BOARD -



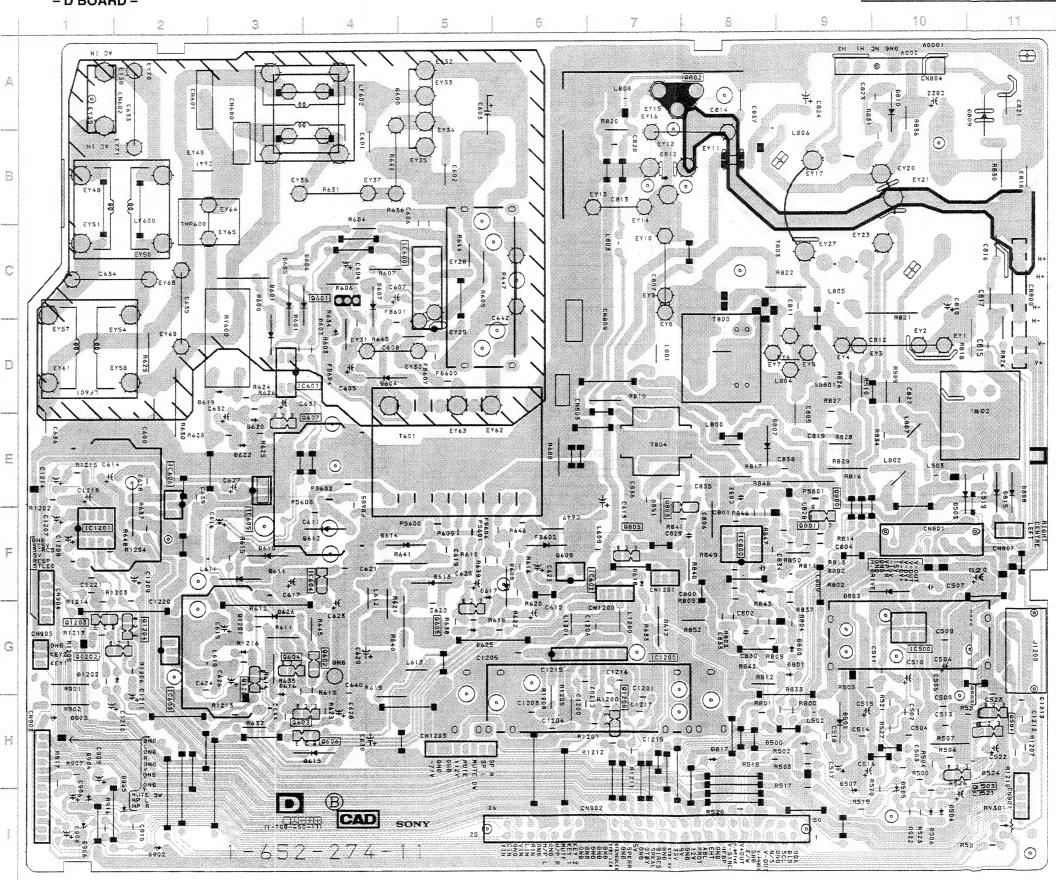
- H3 BOARD -

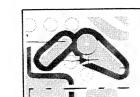


-F1 BOARD -



- D BOARD -



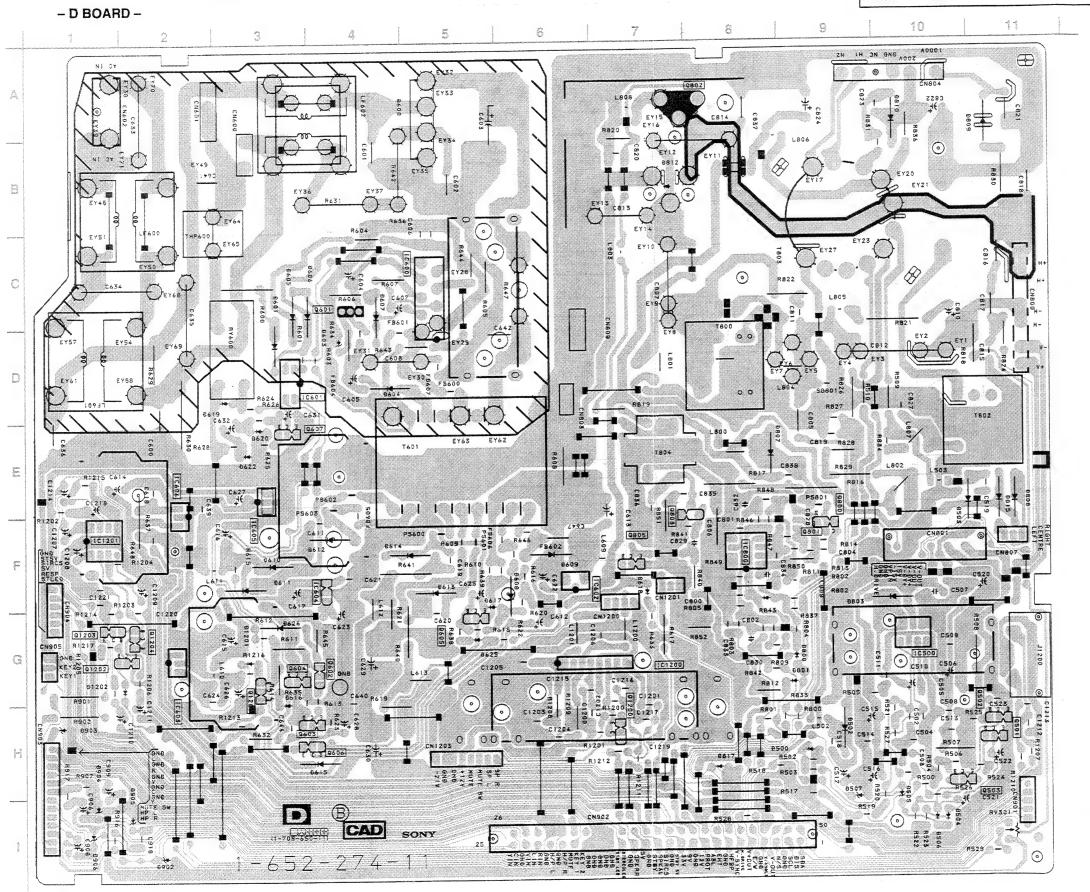


NOTE: The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

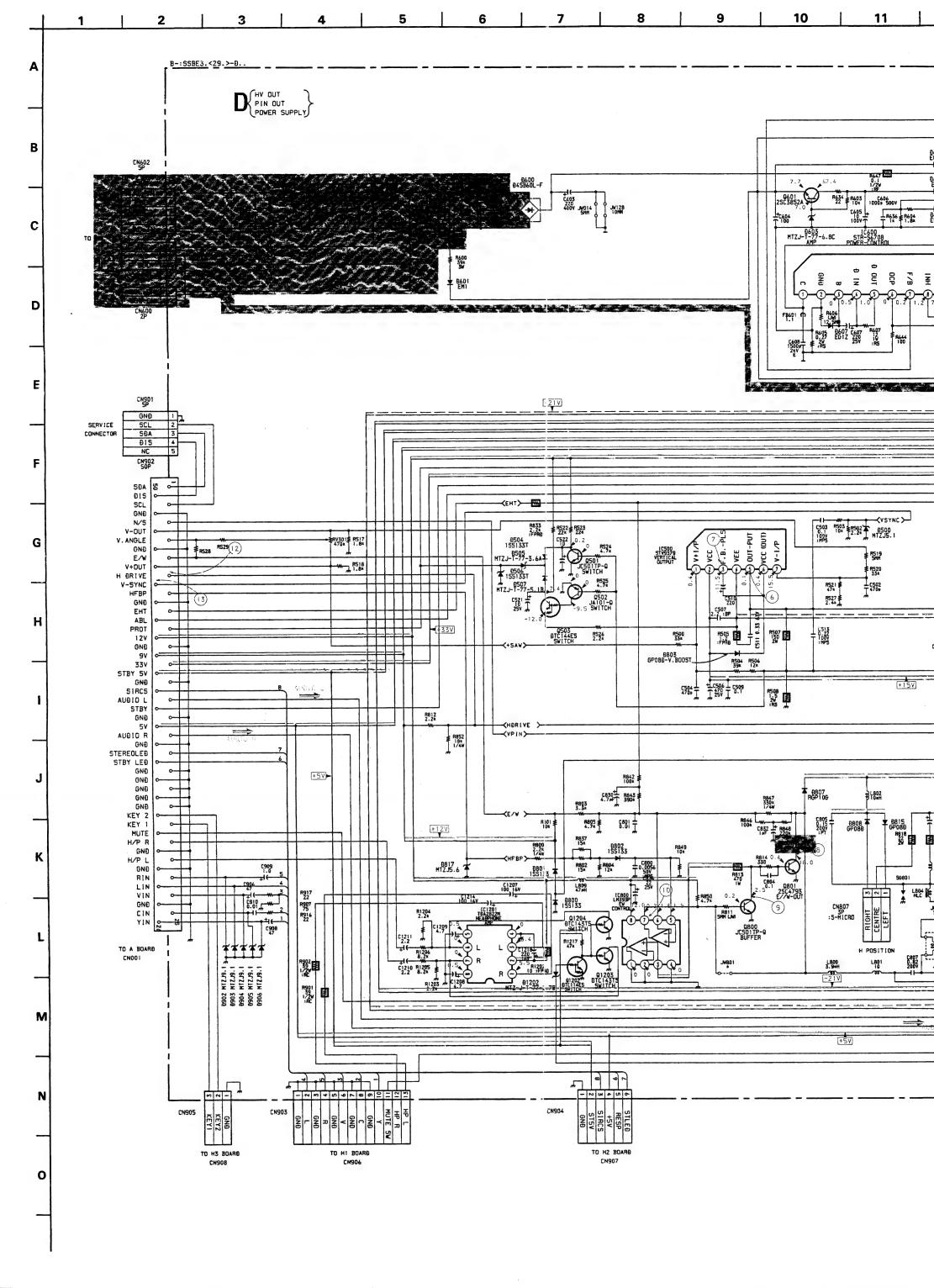
SIRCS RECEIVE INDICATOR

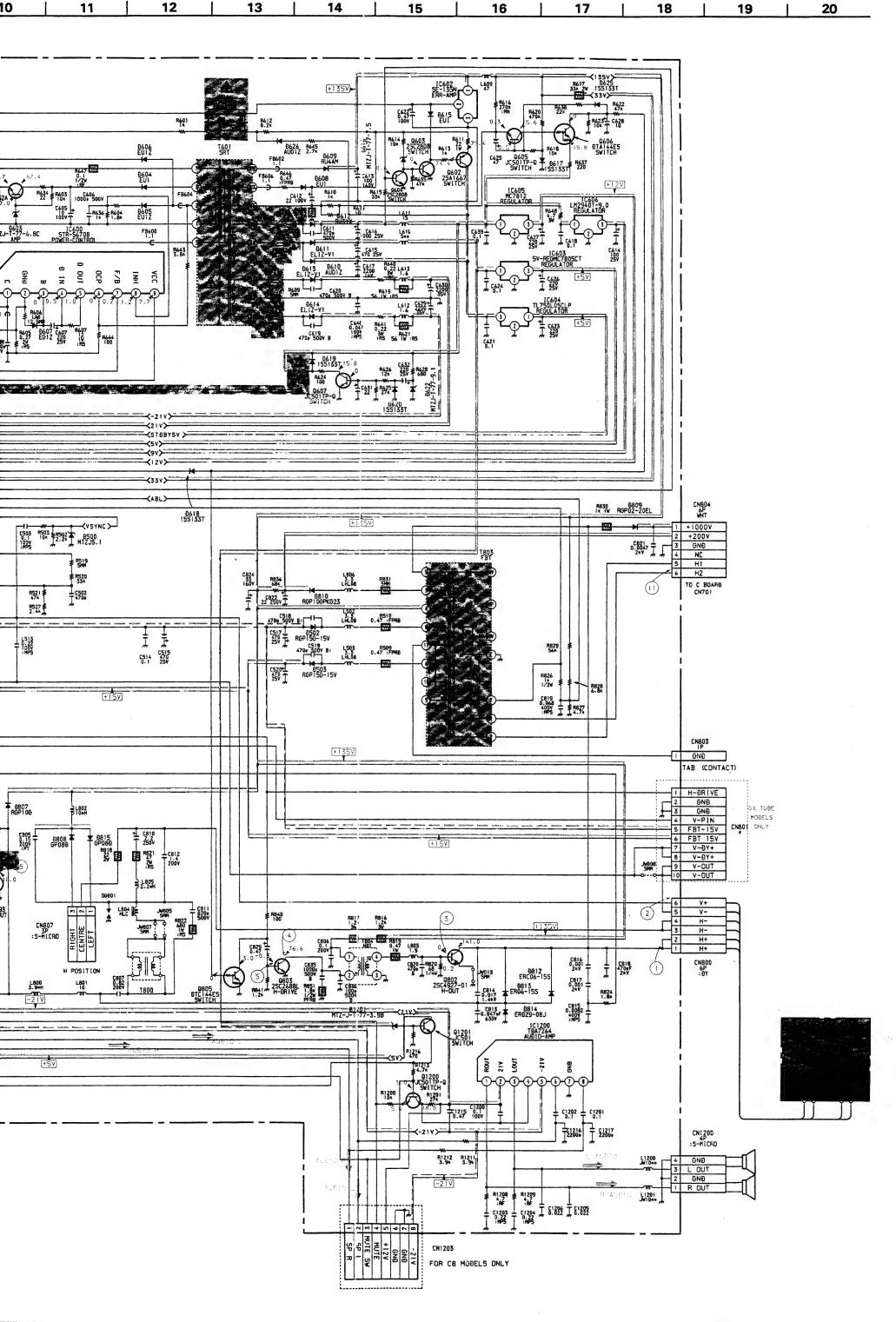
H3 [CONTROL SW] F1 [AC IN POWER SW]

HV OUT PIN OUT POWER SUPPLY

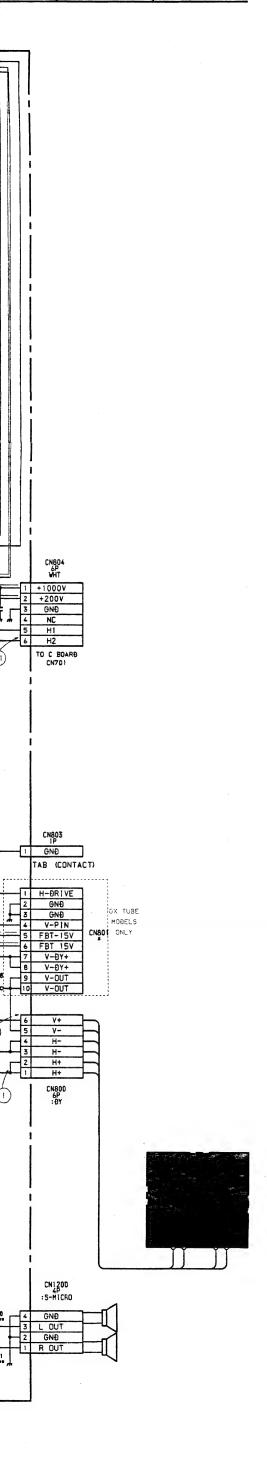


IC		D600	A - 4
	0 10	D601	C-3
IC500	G - 10	D603	D-4
IC600	C-5	D604	D-4
IC601	D-4	D605	C-3
IC602	F-7	D606	C-4
IC603	H-2	D607	C-4
IC604	F-4	D608	F-6
IC605	F-3	D609	F-6
IC606	E-2	D610	F-3
IC800	F-8	D611	F-3
IC1200	G-7	D612	F-4
IC1201	F-1	D613	F-5
TDANGICTOD		D614	F-4
TRANSISTOR		D615	H - 4
Q501	H - 11	D616	G-3
Q502	H - 11	D617	F-5
Q503	1-11	D618	F-7
Q601	C - 4	D619	D-2
Q602	G - 4	D620	E-3
Q603	H - 3	D622	E-3
Q604	G-3	D625	G-5
Q605	G - 5	D626	G-3
Q606	H-4	D800	G-9
Q607	E-4	D801	G-9
Q800	E-9	D802	F-9
Q801	F-9	D803	F - 9
Q802	A - 8	D807	E - 9
Q803	F-7	D808	E - 11
Q805	F-7	D809	A - 11
Q1200	H - 7	D810	A - 10
:		D812	B - 7
DIODE		D815	E-11
D5 0 0	G - 9	D817	H - 8
D502	G-9	D902	1-2
D503	F - 10	D903	H - 1
D504	1-10	D904	H - 1
D505	l - 10	D905	H - 2
D506	1-10	D906	1-1
D507	G-9		
			······································

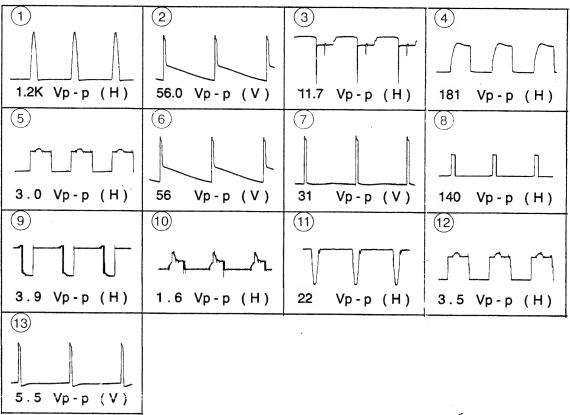




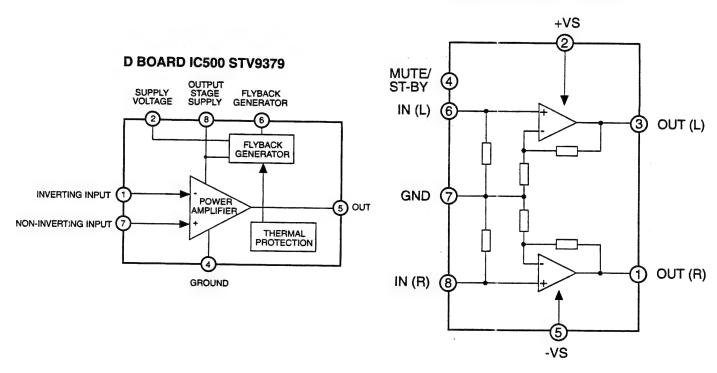




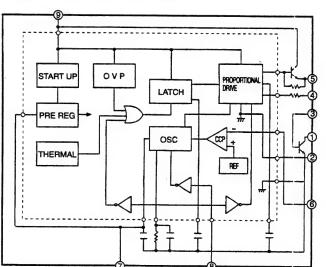
WAVEFORMS D BOARD

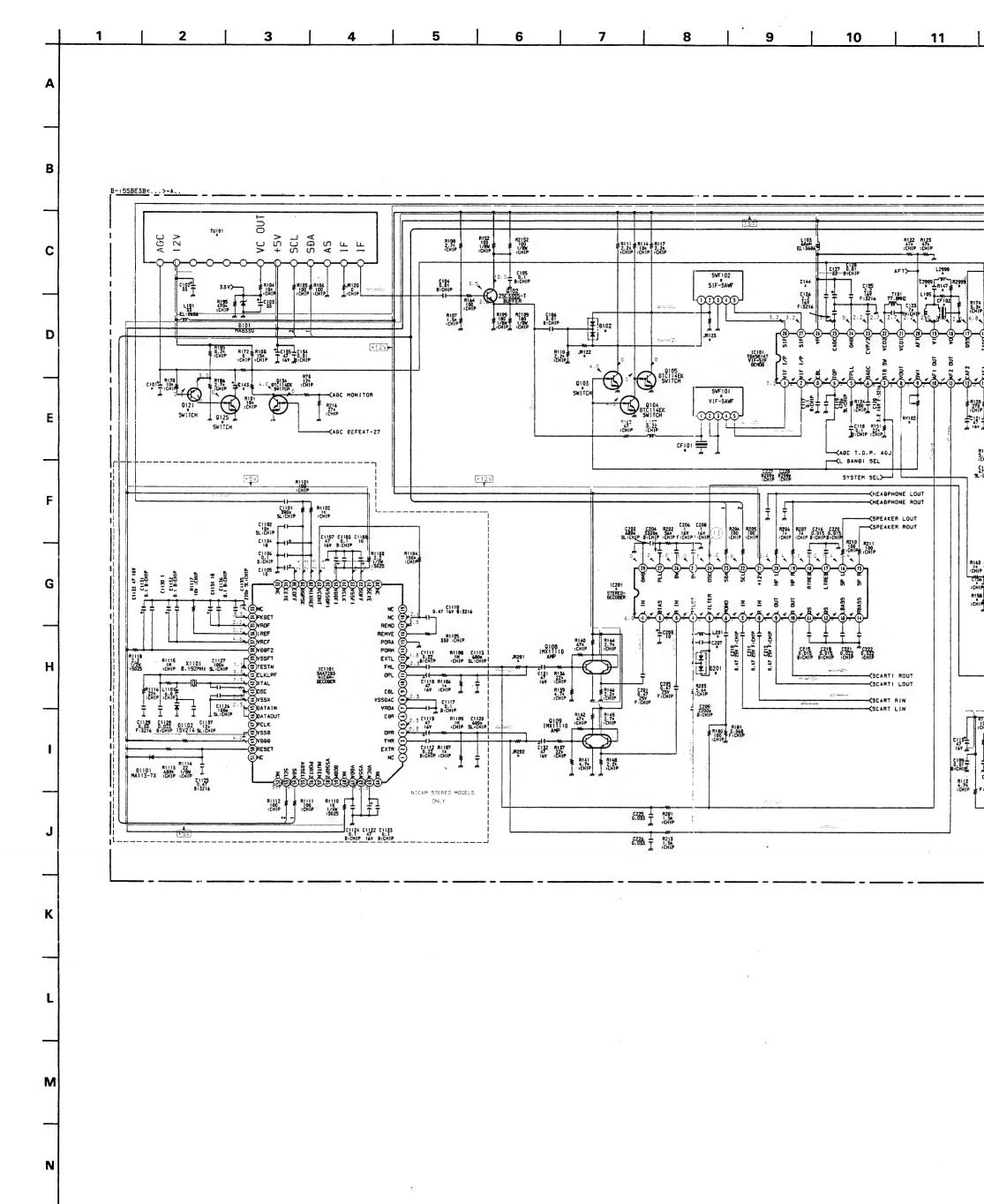


D BOARD IC1200 TDA7264



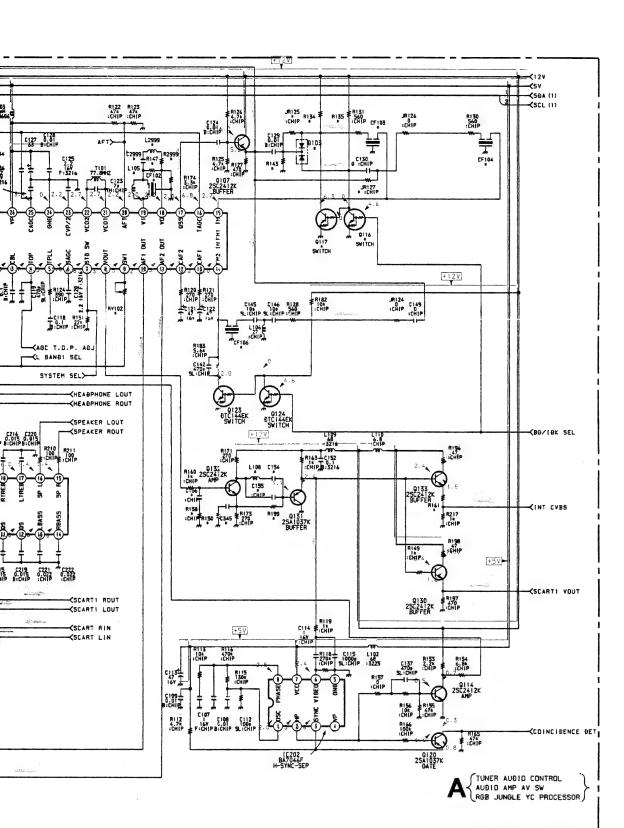
D BOARD IC600 STR-S6708





0

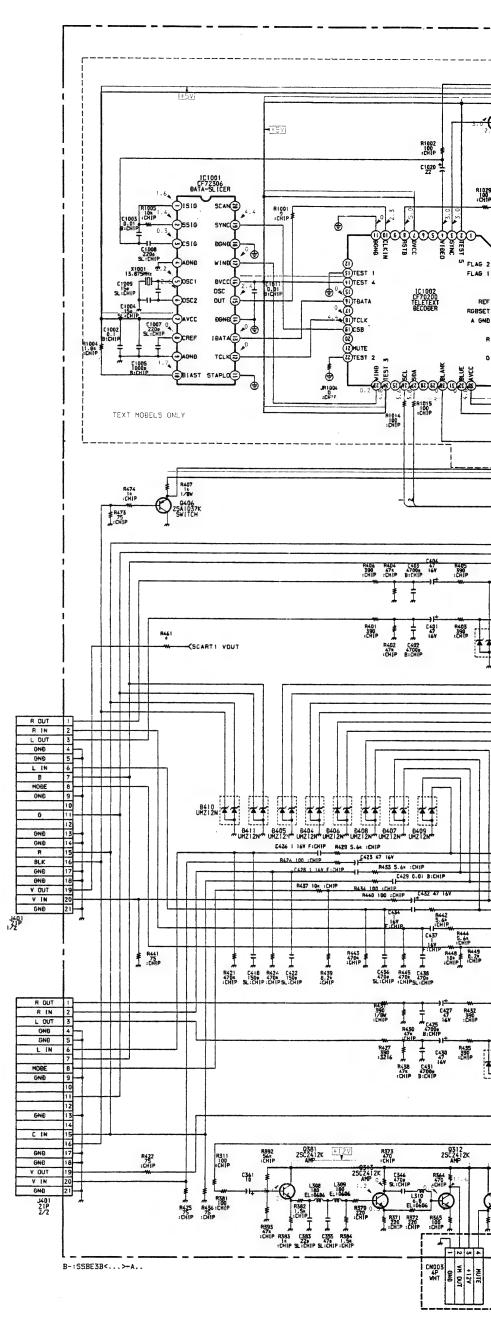


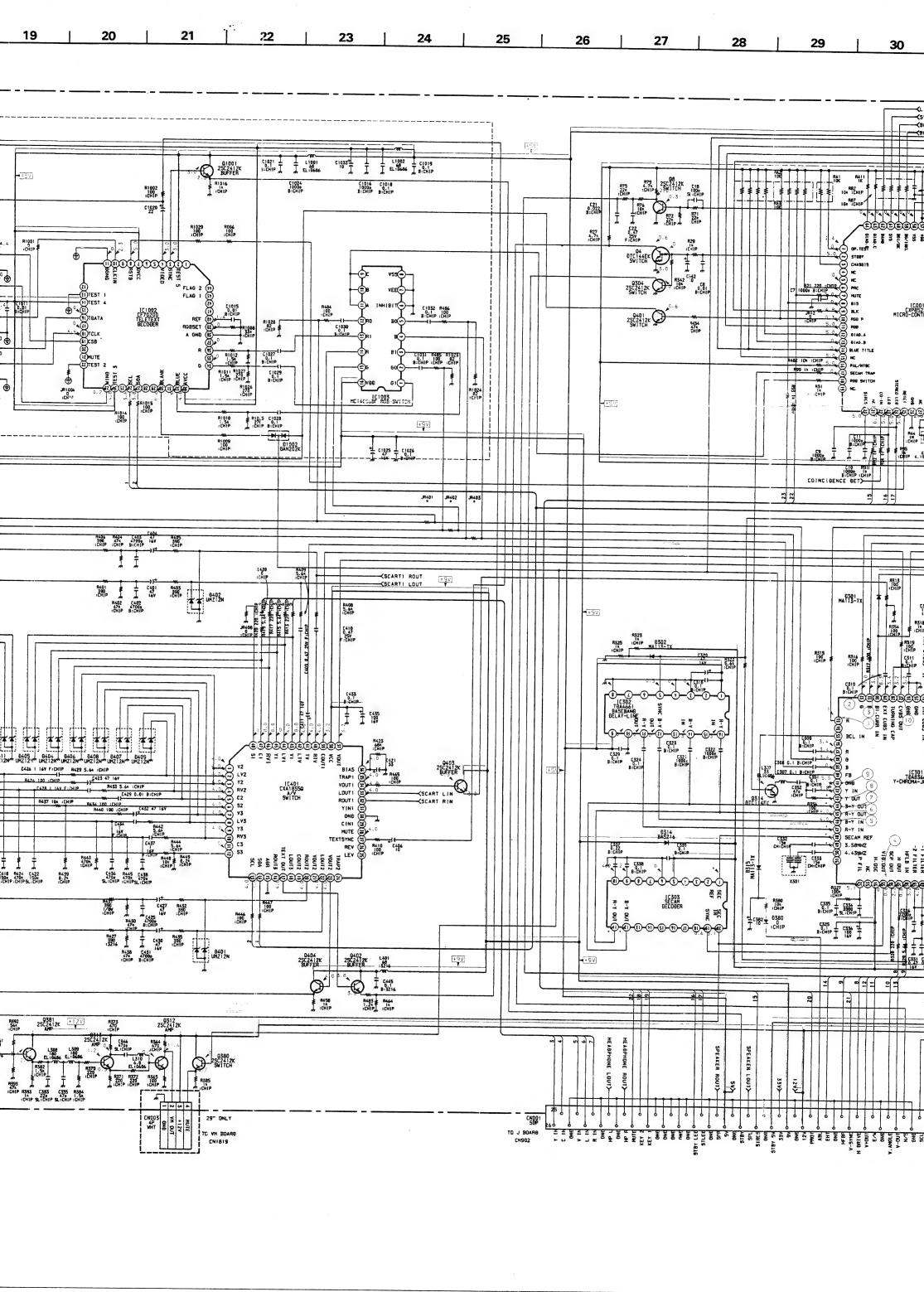


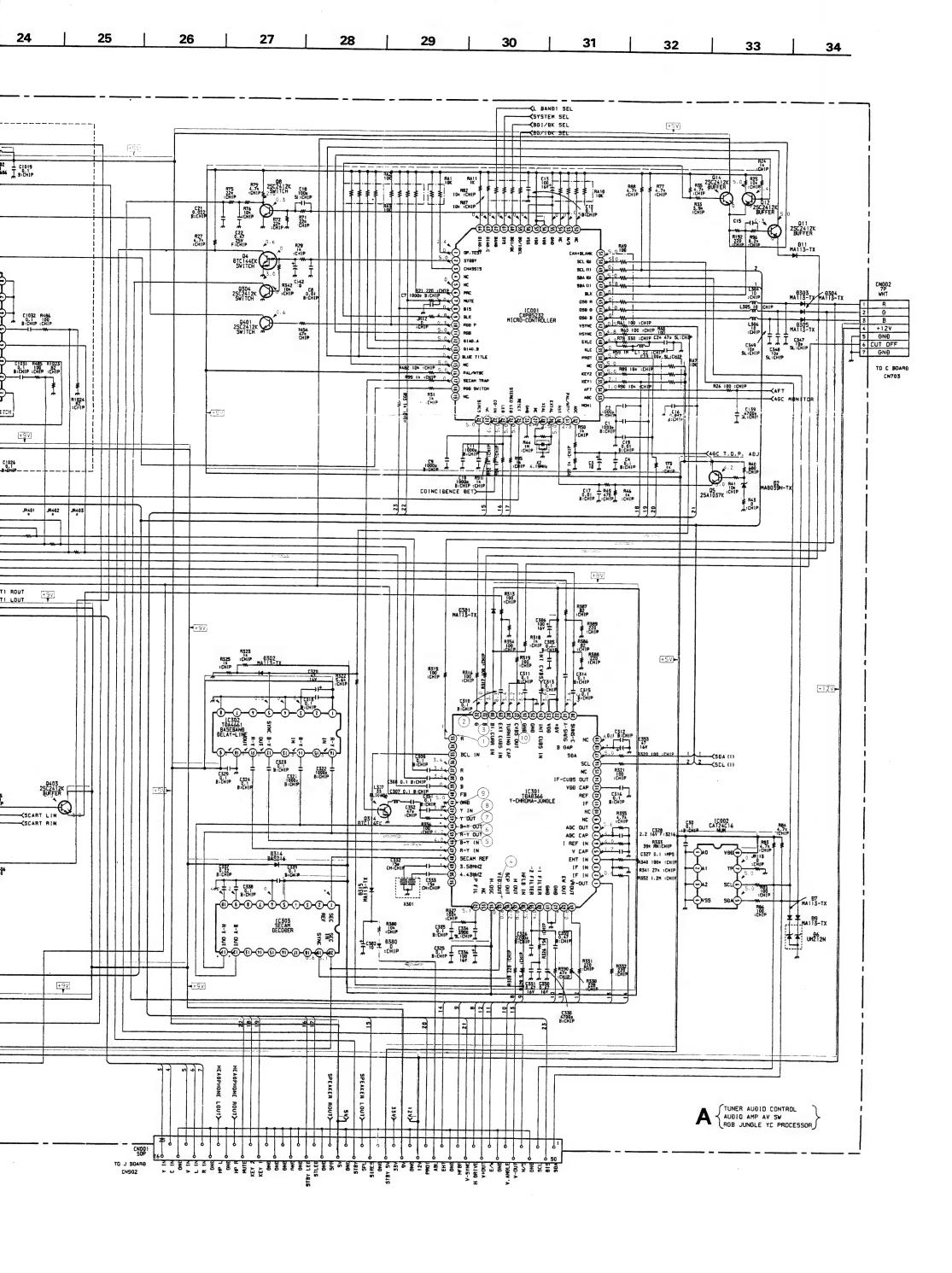
Voltages indicated with the mark $\,$ on the schematic diagram are shown in the table below.

A BOARD

IC	Pin	PAL	SECAM	NTSC 3.58	NTSC 4.45
IC301	17	4.0	4.0	4.0	0
	35	3.6	2.5	3.5	3.5
	44	1.5	3.1	1.5	1.5
	45	1.5	3.0	1.5	1.5
	48	1.7	4.4	1.6	1.7
	49	1.4	1.4	2.0	1.4
	50	2.0	2.0	1.4	2.0
	63	3.4	2.5	2.2	2.5
IC303	1	1.7	4.4	1.6	1.7
	11	1.5	3.0	1.5	1.5
	12	1.5	3.1	1.5	1.5



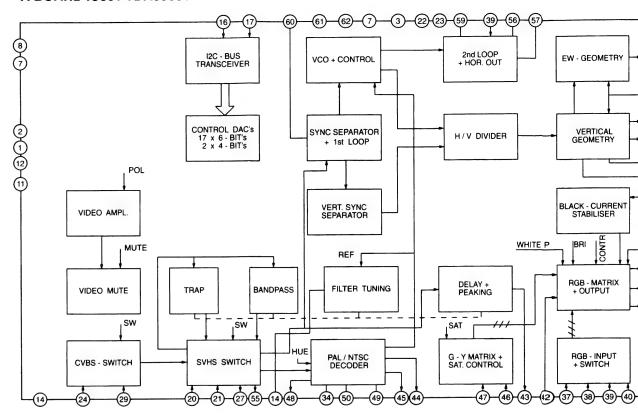




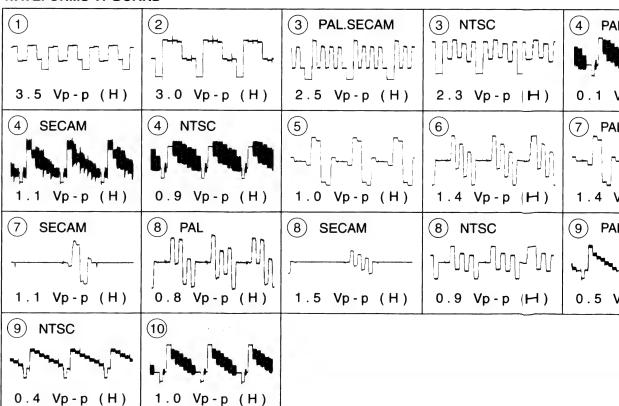
A BOARD * MARK

Ref	X2901D	X2901A	X2900B	X2901B	X2903E	X2902L	X2902U	X2901K
C101	22mF	22mF	4.7mF	4.7mF	22mF	22mF	22mF	22mF
C143	-	-	100mF 16V	100mF 16V	-	-	-	-
C144	•	-	1mF	1mF	-	•	-	-
C154	180pF	180pF	150pF	150pF	180pF	-	-	180pF
C155	47pF	47pF	33pF	33pF	47pF	-	-	47pF
C156	18pF	18pF	-	-	18pF	•	-	18pF
C207	0.0018mF 100V	. •	-	0.0018mF 100\				
CF101	EFCV4045A4	EFCV4045A4	EFCV4045A4	EFCV4045A4	EFCV4045A4	-	-	EFCV4045A4
CF102	5.5mHz	5.5mHz	5.5mHz/6.6mHz	5.5mHz/6.6mHz	5.5mHz	6.0mHz	6.0mHz	5.5mHz
CF103	5.5mHz	5.5mHz	5.5mHz	5.5mHz	5.5mHz	-	-	5.5mHz
CF104	6.5mHz	-	6.0mHz	6.0mHz	-	SFE6.0MB	SFE6.0MB	6.5mHz
CF106	5.75mHz	5.75mHz	5.75mHz	5.75mHz	5.75mHz	-	-	5.75mHz
D102	-	-	DAN202K	DAN202K	-	-	-	•
D103	DAN202K	-	DAN202K	DAN202K	-	-	-	DAN202K
D201	DA204K	DA204K	DA204K	DA204K	DA204K	-	-	DA204K
IC201	TDA6612	TDA6612	TDA6612	TDA6612	TDA6612	TDA6622	TDA6622	TDA6612
C303	TDA8395T	-	TDA8395T	TDA8395T		-	-	TDA8395T
JR122	0 :CHIP	0 :CHIP	-	-	0 :CHIP	0 :CHIP	0 :CHIP	0:CHIP
JR123	0 :CHIP	0 :CHIP	-	-	0 :CHIP	0 :CHIP	0 :CHIP	0 :CHIP
JR125		0 :CHIP	-	-	0:CHIP	-	-	-
JR127	-	-		-	-	0 :CHIP	-	-
JR201	0 :CHIP	0 :CHIP	0 :CHIP	0 :CHIP	-	-	-	0:CHIP
JR202	0 :CHIP	0:CHIP	0 :CHIP	0 :CHIP	-	-	-	0 :CHIP
JR401	-	-	0 :CHIP	-	-	-	•	-
JR402	-	-	0 :CHIP	-	-	-	-	-
JR403	-	-	0 :CHIP		-	-	-	-
_105	15µH	15µH	8.2µH	8.2µH	15µH	15µH	15µH	15µH
_108	15µH	15µH	27μΗ	27μΗ	15µH		-	15µH
_201	4.7mmH	4.7mmH	4.7mmH	4.7mmH	4.7mmH	-	-	4.7mmH
2103	-		DTC114EK	DTC114EK	-		-	-
Q116	DTC144EK	-	DTC144EK	DTC144EK	-	•	-	DTC144EK
Q117	DTC144EK	-	DTC144EK	DTC144EK	-	-	-	DTC144EK
Q121	-	-	2SA1037K	2SA1037K	-	-	-	-
Q125	-	-	DTC114EK	DTC114EK	+	•	-	
₹134	2.2K	-	2.2K	2.2K	-	-	-	2.2K
R135	2.2K	-	2.2K	2.2K	-	•	-	2.2K
R143	2.2K	-	2.2K	2.2K	-	•	-	2.2K
R147	270	270	150	150	270	270	270	270
R158	12K	12K	-	-	12K	-	-	12K
R199	330	330	470	470	330	•	-	330
RV102	-	-	22K	22K	-	-	-	-
SWF101	K3953M	K3953M	K3953M	K3953M	K3953M	J3950M	J3950M	K3953M
SWF102	K9350M	K9350M	K9453M	K9453M	K9350M	K9350M	K9350M	K9350M
TU101	UV-916H	UV-916H	UV-916H	UV-916H	UV-916H	U-944C	U-944C	UV-916H
5101	04-31011	O 4-910F1	04-91011	04-91011	04-91011	0-3440	0.3440	1 07-51011

A BOARD IC301 TDA8366T

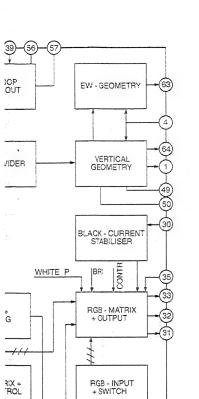


WAVEFORMS A BOARD

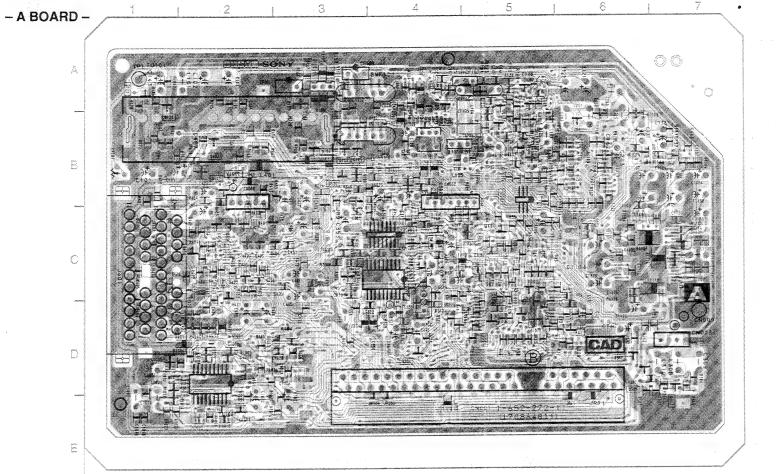




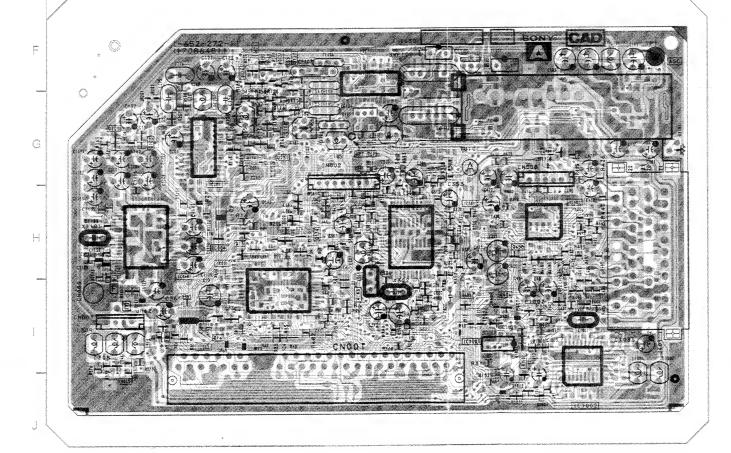
KV-X290



TSC	4 PAL
Vp - p (H)	0.1 Vp-p (H)
Vp - p (H)	7 PAL.NTSC
i i i i i	9 PAL.SECAM
Vp-p (H)	0.5 Vp-p (H)



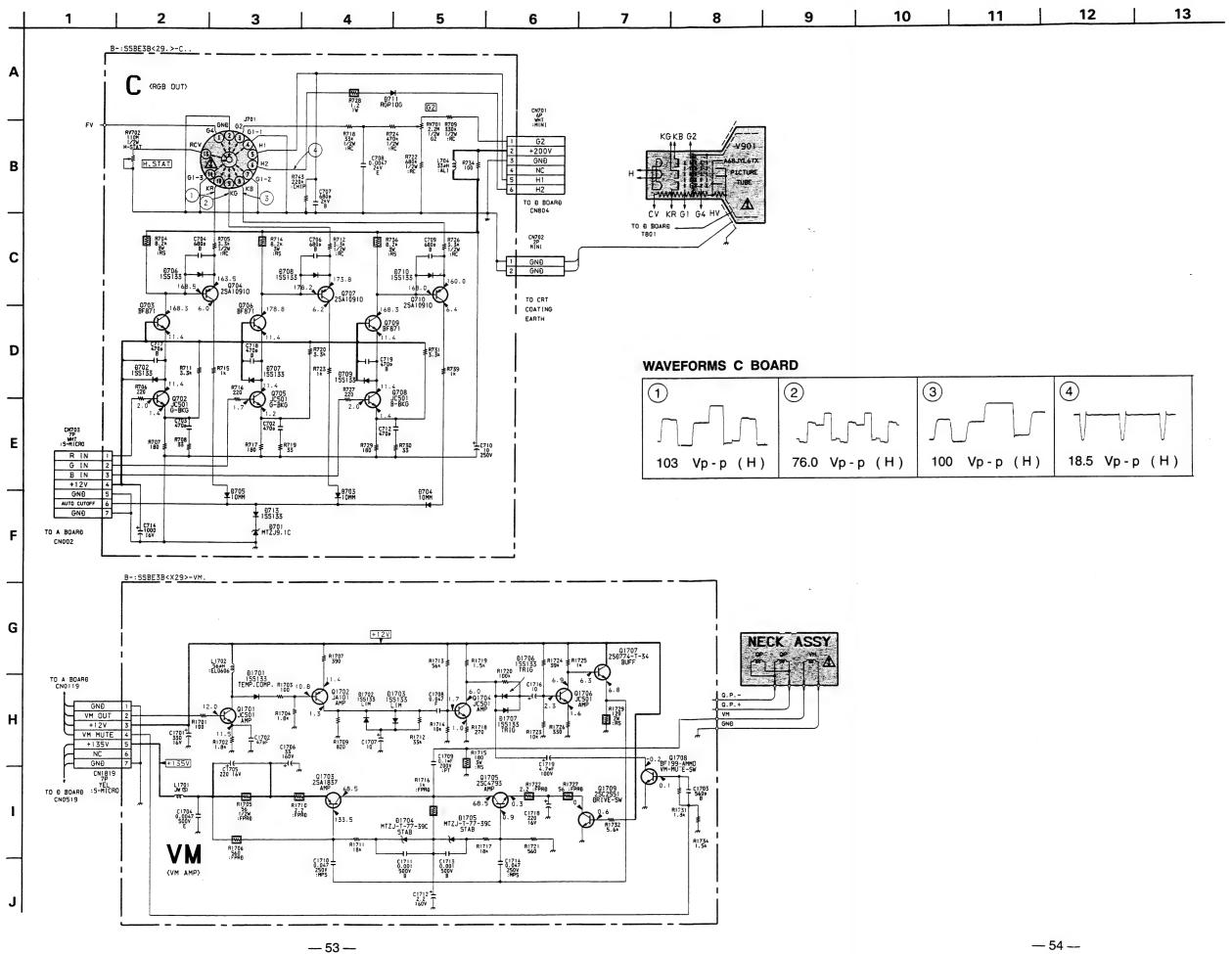
KV-X290



	IC	Q313	J - 1	***************************************
IC001	H - 2	Q314	C - 4	
1C001	1-2	Q380	D-6	
IC101	F-4	Q381	D-6	
	G-2	Q401	1-5	
IC201	B-5	Q402	B-2	
IC202	H-5	Q403	B - 3	
IC302	C-4	Q404	G - 6	
IC302	C-4	Q1001	1-6	
IC303	H-6	Q1003	J - 5	
IC1001	D-2			
IC1001	J-6	D	IODE	<u></u>
IC1002	1-5	D6	1-2	
IC1003	H-2	D7	1-2	
101101	11-2	D9	1-2	
TRAN	ISISTOR	D11	D - 5	
		D101	B-2	
Q4	D-6	D102	B-4	
Q8	C - 5	D103	A - 5	
Q11	D-5	D201	B-6	
Q12	C - 5	D301	G - 4	
Q14	1-2	D302	C - 4	
Q102	F-5, A-3	D303	H-3	
Q103	B-3	D304	B-5	
Q104	B - 3	D305	C - 4	
Q105	B - 3	D314	B-3	
Q107	B-5	D380	1-4	
Q108	G-2	D401	C-2	
Q109	G-1	D402	C-2	
Q114	G-3	D404	C-2	
Q116	G-3	D405	C-2	
Q117	F-3	D406	C-2	
Q120	C-5	D407	C-2	
Q121	A - 1	D408	C - 2	
Q123	B-4	D409	C-2	
Q124	F-3	D410	C - 2	
Q125	B - 1	D411	D-2	
Q130	B-3	D1002	1-6	
Q131	G-3	D1003	J-6	
Q132	G-3	D1101	H - 1	
Q133	B-4	D1102	C - 7	
Q304	D-4 E-7	***************************************		
Q312	E-/	***************************************		
<u></u>		<u> </u>		

Note:

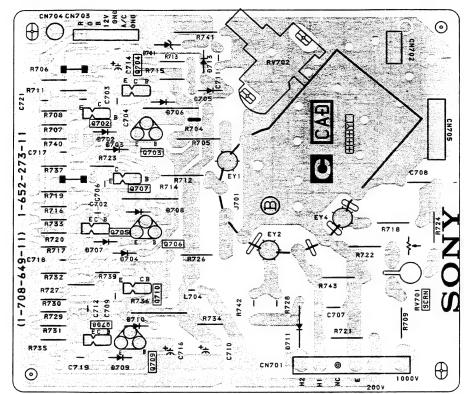
- Pattern from the side which enables seeing.
- · Pattern of the rear side.



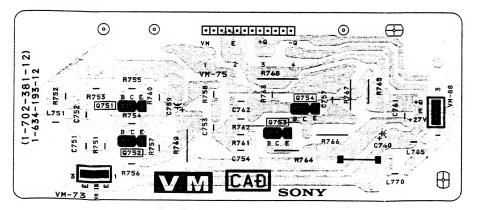




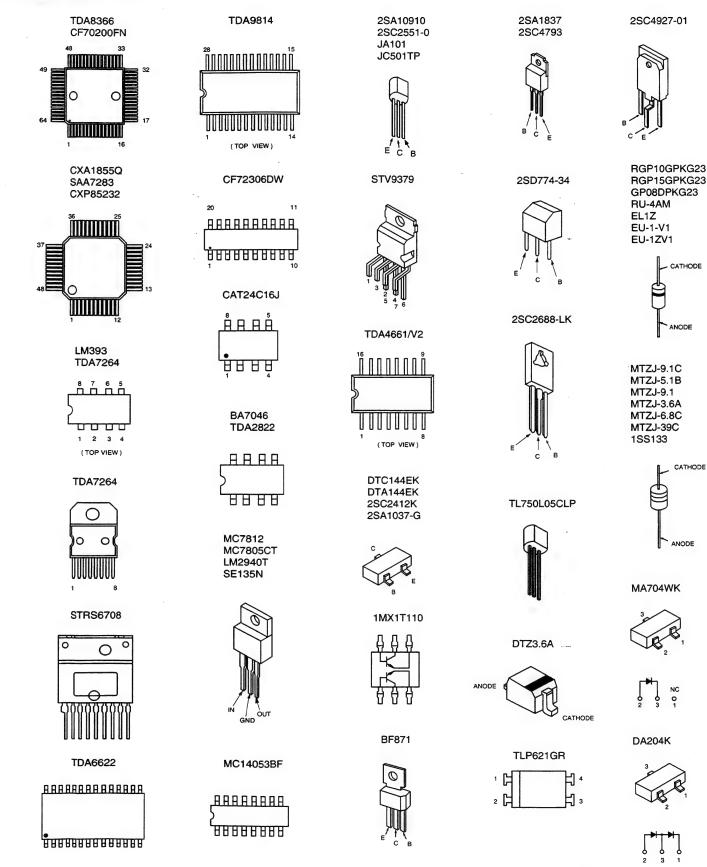
- C BOARD -



- VM BOARD -



5.4 SEMICONDUCTORS



UMZ12N

MA8039

SLR-54VR3

MA113

SECTION 6

EXPLODED VIEWS

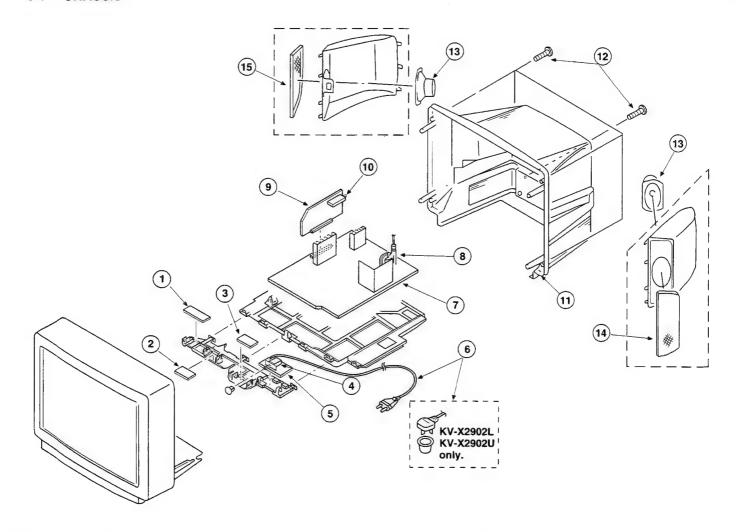
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked ! are critical for safety.

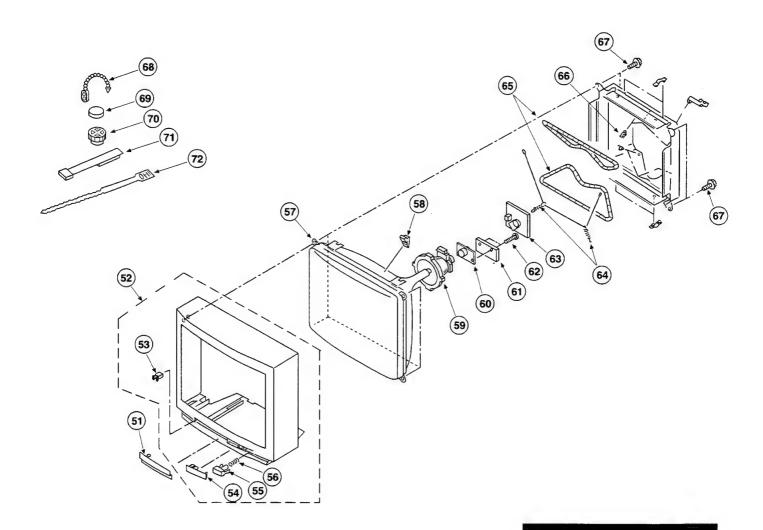
Replace only with the part number specified.

6-1. CHASSIS



REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	*1-652-275-11	H1 BOARD			*A-1632-198-A	A BOARD, COMPLETE	(KV-X2900B)
2	*1-652-270-11	H3 BOARD			*A-1632-174-A	A BOARD, COMPLETE	(KV-X2901D)
3	*1-652-269-11	H2 BOARD			*A-1632-194-A		
4	▲ 1-571-433-11	SWITCH, PUSH (AC	POWER)		*A-1632-197-A	A BOARD, COMPLETE	
5	*1-652-271-11	F1 BOARD			*A-1632-195-A	A BOARD, COMPLETE	(KV-X2902L)
-6	本 1-751-680-11	CORD, POWER (WITE			*A-1632-199-A	A BOARD, COMPLETE	(KV-X2902U)
			(KV-X2901D/X2901A)	10	1-693-185-11	TUNER (UV916H) (F	V-X2900B/X2901B
	▲ 1-590-46Q-11	CORD, POWER (WITE		母		/X2903	E/X2901K/X2901D
			2901B/X2903E/X2901K)			/X2901	A/X2902L)
	▲ 1-590-762-11	CORD, POWER (WITE			1-693-184-11	TUNER (U944C) (KV	-X2902U)
353	all in a second and the second and t		(KV-X2902U/X2902L)	11	4-202-713-01	COVER, REAR	
7		D BOARD, COMPLETE		12	4-039-358-01	SCREW (4x16), (+)	BV TAPPING
_ 8	aphronouslyses a registrated at Lifesperses were to me a measure of the section of	FBT ASSY (UX1604A		13	1-544-727-11	SPEAKER (7.5x13CM)
9	*A-1632-193-A			14	X-4200-087-1	BAFFLE (R) ASSY,	BOARD
	*A-1632-196-A	A BOARD, COMPLETE	3 (KV-X2901B)	15	X-4200-088-1	BAFFLE (L) ASSY.	BOARD

6-2. PICTURE TUBE



The components identified by shading and marked \hat{P}_{λ} are critical for safety.

Replace only with the part number specified.

REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
51	4-202-701-01	DOOR, CONTROL		61	*A-1644-028-A	VM BOARD, COMPLETE	
52	X-4200-157-1	BEZNET ASSY	53-56	62	4-039-357-01		PING
53	4-386-710-11	CATCHER, PUSH		63	*A-1638-046-A	C BOARD, COMPLETE	
54	4-202-708-01	WINDOW, ORNAMENTAL		64	4-369-318-31		
55	4-202-709-01	BUTTON, POWER		65	A 1-402-347-21	POLIT DECAUSSING	LENG-LOCK-HORSEN, LO
56	4-329-112-51	SPRING		66	4-034-296-01		
57	A. 8-733-831-05	CRT SD-191 (A68,0YE61X)		67	4-036-188-01		
58	3-704-495-01	SPACER, DY		68	4-308-870-00		
59	4 8-451-313-61	DEGLESTION FORE (129 FA)	Company of the Company	69	1-452-032-00	MAGNET, DISK; 10MMØ	
68	1-452-509-41	NECK ASSY, CRE (NA-308)		70	1-452-094-00		15MMØ
				71	X-4387-214-1		
				72	3-701-007-00		

ELECTRICAL PARTS LIST SECTION 7

The components identified by shading and marked A are critical for safety.
Replace only with the part number

specified.

Items marked "* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F: nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

MF: mF, PF: mmF

 $MMH: mH, \mu H: mH$





							_		
REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION		REMARK
	*1-652-271-11	F1 BOARD			C18 C19	1-163-117-00 1-164-232-11	CERAMIC CHIP 100PF CERAMIC CHIP 0.01MF	5% 10%	50V 50V
	< CON	NECTOR >			C21		CERAMIC CHIP 0.022MF	10%	25V
		PIN, CONNECTOR (POWER)	i indiani da		C22 C23	1-164-005-11 1-163-117-00	CERAMIC CHIP 0.47MF CERAMIC CHIP 100PF	5%	25V 50V
CN604 A	to alone white a make a man and a large child	PIN, CONNECTOR (POWER)		, S\$,0.4	C24 C30	1-163-109-00 1-164-004-11	CERAMIC CHIP 47PF CERAMIC CHIP 0.1MF	5% 10%	50V 25V
	< FUS		and the second second second second	er in francisk jan gen og god i tillgjenskap som densy i posso i	C101	1-124-916-11	ELECT 22MF	20%	50V
F601 A	1-576-232-21 1-533-230-11	FUSE (H.B.C.) 5A/250V HOLDER, FUSE; F601					(KV-X2901D/X2901A/X29 X2902L/X2901K)	03E/X2902T	J
		TCH >		nomende in derinde i i in in der de companiè de distribuit de describuit de companiè de co		1-124-927-11		20%	50V
S601 A	1-571-433-11	SWITCH, PUSH (AC POWER)			C102	1-124-917-11		20%	50V
******	*******	*******	*****	*****	C103 C104	1-124-917-11 1-164-232-11		20% 10%	50V 50V
					C105	1-164-004-11		10%	25V
	*A-1632-174-A	A BOARD, COMPLETE (KV-X	(2901D)		C106	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
	*A-1632-193-A	A BOARD, COMPLETE (KV-X	(2901A)		C107	1-164-346-11			16V
	+3_1622_100_3	**************************************	(40005		C108 C109	1-164-232-11		10%	50V
	"A-1032-130-A	A BOARD, COMPLETE (KV-X	149000)		C109	1-164-232-11 1-163-117-00	CERAMIC CHIP 0.01MF CERAMIC CHIP 100PF	10% 5%	50V 50V
	*A-1632-196-A	A BOARD, COMPLETE (KV-X	(2901B)		C113	1-124-477-11		20%	16V
	*A-1632-194-A	A BOARD, COMPLETE (KV-X	(2903E)		C114	1-164-346-11	CERAMIC CHIP 1MF		16V
		**********			C115	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
	*A-1632-199-A	A BOARD, COMPLETE (KV-X	(29020)		C117	1-164-004-11		10%	25V
	+3 1630 105 3	**************************************	20027		C118	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
	-A-1032-193-A	A BOARD, COMPLETE (KV-X	(Z302F)		C119	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
	*A-1632-197-A	A BOARD, COMPLETE (KV-X	(2901K)		C120	1-164-337-11	CERAMIC CHIP 2.2MF		16V
		***********			C121	1-124-477-11		20%	16V
		1.67707			C122	1-124-477-11	ELECT 47MF	20%	16V
	< CAP	ACITOR >			C123 C124	1-163-090-00 1-164-232-11	CERAMIC CHIP 7PF	0.25PF 10%	
C1	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C124	1-104-232-11	CERAMIC CHIP 0.01MF	10%	50V
C2	1-163-009-11		10%	50V	C125	1-164-337-11	CERAMIC CHIP 2.2MF		16V
C3	1-124-907-11	ELECT 10MF	20%	50V	C126	1-164-337-11	CERAMIC CHIP 2.2MF		16V
C4	1-164-004-11		10%	25V	C127	1-124-917-11	ELECT 33MF	20%	50V
C7	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C128	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C8	1_164 000 11	CERAMIC CHIP 0.01MF	10%	E 037	C129	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C9	1-163-009-11		10%	50V 50V	C130	1-216-295-00	METAL GLAZE 0 5	% 1/10W	,
C10	1-163-009-11		10%	50V	C130	1-124-477-11	ELECT 47MF	% 1/10W 20%	16V
C11	1-163-009-11		10%	50V	C132	1-124-477-11	ELECT 47MF	20%	16V
C12	1-164-004-11		10%	25V	C134	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
~4.0					C135	1-124-477-11	ELECT 47MF	20%	16V
C13	1-126-101-11		20%	16V	C137	1-163-133-00	CERAMIC CHIP 470PF	5%	50V
C16 C17		CERAMIC CHIP 0.047MF CERAMIC CHIP 0.01MF	10% 10%	25V 50V	C142	1_162_122 00	CEDANTO CHITA 470AF	5%	E 017
017	1-104-232-11	CHARMIC CHIP U.UIMF	100	304	C142	1-103-133-00	CERAMIC CHIP 470PF	2%	50V



REF.NO.	PART NO.	DESCRIPTION	į	REMARK	REF.NO.	PART NO.	DESCRIPTION	N		REMARK
C143	1-126-101-11	ELECT 100MF (KV-X2900B/X2901B)	20%	16V	C323 C324	1-164-004-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP		10% 10%	25V 25V
C144	1-164-346-11	CERAMIC CHIP 1MF (KV-X2900B/X2901B)		16V	C325 C326			0.1MF	10% 10%	25V 50V
C145	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	C327	1-136-165-00		0.1MF	5%	50V
C146 C149		CERAMIC CHIP 10PF	5% 1/10W	50V	C328 C329	1-164-337-11 1-164-004-11	CERAMIC CHIP		1.00	16V
C150		ELECT 47MF	20%	16V	C329	1-163-017-00	CERAMIC CHIP		10% 10%	25V 50V
C151	1-124-477-11		20%	16V	C331	1-165-320-11	CERAMIC CHIP		10%	16V
C152	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C332	1-163-097-00	CERAMIC CHIP		5%	50V
C154	1-163-123-00	CERAMIC CHIP 180PF	5%	50V	C333	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
V		(KV-X2901D/X2901A/X2903E	2.17		C334	1-163-016-00	CERAMIC CHIP		10%	50V
	1-163-121-00	CERAMIC CHIP 150PF	5%	50V	C335	1-164-004-11	CERAMIC CHIP		10%	25V
		(KV-X2900B/X2901B)			C336	1-126-101-11		100MF	20%	16V
0155	1 162 100 00	0001470 0HTD 4000	F0.	F 0	C337	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C155	1-163-109-00	CERAMIC CHIP 47PF (KV-X2901D/X2901A/X2903E	5% /¥20/1¥1	50V	C338	1-164-004-11	CERAMIC CHIP	0.1369	10%	25V
	1-163-105-00	CERAMIC CHIP 33PF	5%	50V	C339	1-164-004-11	CERAMIC CHIP		10%	25V 25V
	2 200 200 00	(KV-X2900B/X2901B)	30	301	C342	1-124-907-11		10MF	20%	50V
C156	1-163-099-00	CERAMIC CHIP 18PF	5%	50V	C346	1-163-133-00	CERAMIC CHIP		5%	50V
		(KV-X2901D/X2901A/X2903E	/X2901K))	C347	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C201	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C348	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C202	1-163-137-00	CERAMIC CHIP 680PF	5%	50V	C349	1-163-093-00	CERAMIC CHIP		5%	50V
C203	1-124-907-11		20%	50V	C350	1-165-320-11	CERAMIC CHIP		10%	16V
C204	1-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V	C351	1-164-004-11	CERAMIC CHIP		10%	25V
C205	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C352	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C206	1-164-346-11	CERAMIC CHIP 1MF		16V	C353	1-124-477-11		47MF	20%	16V
C207	1-137-613-11	FILM 0.0018MF	2%	100V	C355	1-163-109-00	CERAMIC CHIP		5%	50V
		(KV-X2901D/X2901A/X2900B X2903E/X2901K)	/ 849015		C359 C361	1-163-809-11 1-124-907-11	CERAMIC CHIP	0.04/MF 10MF	10% 20%	25V 50V
C208	1-164-346-11			16V	C382	1-124-907-11		10MF	20%	50V
C209	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	C383	1-163-101-00	CERAMIC CHIP	2202	5%	50V
C210		CERAMIC CHIP 0.47MF		25V	C401	1-124-477-11		47MF	20%	16V
C211	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C402	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C212	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C403	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C215	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	C404	1-124-477-11	ELECT	47MF	20%	16V
C216	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V	C406	1-124-907-11	ELECT	10MF	20%	50V
C219	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	C409	1-164-005-11				25V
C220 C221	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V	C410	1-164-005-11	CERAMIC CHIP	*	0.00	25V
C222	1-163-037-11	CERAMIC CHIP 0.022MF CERAMIC CHIP 0.022MF	10% 10%	25V 25V	C411 C418	1-124-477-11 1-163-121-00	ELECT CERAMIC CHIP	47MF	20% 5%	16V 50V
										304
C225 C226	1-130-489-00		5%	50V	C420	1-216-295-00		0 5%	1/10W	F 0++
C227	1-130-489-00	FILM 0.033MF CERANIC CHIP 0.0082MF	5% 10%	50V 50V	C421 C422	1-124-917-11 1-163-121-00	CERAMIC CHIP	33MF	20% 5%	50V 50V
C228		CERAMIC CHIP 0.0082MF	10%	50V	C422	1-124-477-11		47MF	20%	16V
C305		CERAMIC CHIP 0.1MF	10%	25V	C425		CERAMIC CHIP		10%	50V
C306	1-126-101-11	ELECT 100MF	20%	16V	C426	1-164-346-11	CERAMIC CHIP	1MF		16V
C307	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C427	1-124-477-11		47MF	20%	16V
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C428	1-164-346-11	CERAMIC CHIP	1MF		16V
C309		CERAMIC CHIP 0.1MF	10%	25V	C429	1-164-232-11			10%	50V
C310		CERAMIC CHIP 0.1MF	10%	25V	C430	1-124-477-11	ELECT	47MF	20%	16V
C311		CERAMIC CHIP 0.1MF	10%	25V	C431	1-163-017-00			10%	50V
C312		CERAMIC CHIP 0.1MF	10%	25V	C432	1-124-477-11		47MF	20%	16V
C313 C314		CERAMIC CHIP 0.1MF	10%	25V	C433	1-164-004-11			10%	25V
C315		CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10%	25V 25V	C434 C435	1-164-346-11 1-126-101-11		1MF 100MF	20%	16V 16V
C316 C318		CERAMIC CHIP 0.1MF	10%	25V	C436	1-163-133-00			5%	50V
C320	1-104-004-11	CERAMIC CHIP 0.1MF ELECT 47MF	10% 20%	25V 16V	C437 C438	1-164-346-11 1-163-133-00			5%	16V 50V
C321		CERAMIC CHIP 0.001MF	10%	50V	C445	1-164-004-11			10%	25V
C322		CERAMIC CHIP 0.001MF	10%	50V						

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L	7
	1

REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	<kv-x29< td=""><td>02 - C1033 FITTED ON > 01D/X2901A/X2901B/X2903E> 2902U/X2902L/X2901K></td><td></td><td></td><td>C1136 C1137</td><td>1-164-004-11 1-163-095-00</td><td></td><td>L0% 25V 5% 50V</td></kv-x29<>	02 - C1033 FITTED ON > 01D/X2901A/X2901B/X2903E> 2902U/X2902L/X2901K>			C1136 C1137	1-164-004-11 1-163-095-00		L0% 25V 5% 50V
C1002	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V		< FIL	TER >	
C1003 C1004 C1005 C1007	1-164-232-11 1-163-097-00	CERAMIC CHIP 0.01MF CERAMIC CHIP 15PF CERAMIC CHIP 0.001MF	10% 5% 10% 5%	50V 50V 50V 50V	CF101	0-550-400-00	EFCV 4045 A4 (KV-x2901D/x2901A/x2900B/X x2903E/x2901K)	K2901B
C1008	1-163-125-00	CERAMIC CHIP 220PF	5%	50V	CF102	1-404-134-00	TRAP, CERAMIC (5.5MHZ)	#0004#\
C1009 C1011	1-163-097-00	CERAMIC CHIP 15PF CERAMIC CHIP 0.01MF	5% 10%	50V 50V		1-409-430-11	(KV-X2901D/X2901A/X2903E/X TRAP, CERAMIC	KZ9UIK)
C1:013	1-164-346-11	CERAMIC CHIP 1MF		16V			(KV-X2900B/X2901B)	
C1015	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V		1-409-333-00	(KV-X2902U/X2902L)	
C1016	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V 25V	CF103	0-550-808-10	CPP 5 5 MC2	
C1018 C1019	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10%	25V 25V	CF103	0-330-808-10	(KV-X2901D/X2901A/X2900B/	X2901B
C1020 C1021	1-124-916-11	ELECT 22MF CERAMIC CHIP 0.1MF	20% 10%	50V 25V	CF104	1-567-101-11	X2903E/X2901K) FILTER, CERAMIC (KV-X2901D/X2901K)	
C1024	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V		1-567-100-00	FILTER, CERAMIC	
C1025	1-124-477-11	ELECT 47MF	20%	16V			(KV-X2900B/X2901B)	
C1026 C1027	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10%	25V 25V	CF106	0-550-809-10		
C1028	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	CTUTE 1 0.1	1_570_272_11	(KV-X2901D/X2901A/X2900B/ X2903E/X2901K) FILTER, SURFACE WAVE	X2901B
C1029 C1030	1-164-004-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF	10% 10%	25V 25V	SWF101			
C1031	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	SWF102	1-760-329-11	FILTER, SURFACE WAVE (KV-X2901D/X2901A/X2903E/	x2902H
C1032 C1033	1-164-004-11	CERAMIC CHIP 0.1MF ELECT 10MF	10% 20%	25V 50V			X2902L/X2901K)	ALJULU
		101 - C1137 FITTED ON >				1-760-244-11	FILTER, SURFACE WAVE (KV-X2900B/X2901B)	
		-X2903E/X2902U/X2902L>				. CON	NECTOR >	
C1101	1-163-131-00	CERAMIC CHIP 390PF	5%	50V				F05
C1102 C1103	1-163-093-00	CERAMIC CHIP 10PF CERAMIC CHIP 0.1MF	5% 10%	50V 25V	CN001 CN002	1-695-302-11	CONNECTOR, BOARD TO BOARD PIN, CONNECTOR 7P	50P
C1103	1-124-907-11	ELECT 10MF	20%	50V	CN003	*1-568-879-11	PIN, CONNECTOR 4P	
C1105	1-124-907-11	ELECT 10MF	20%	50V		< DIC	DE >	
C1106		CERAMIC CHIP 0.1MF	10%	25V	70	0 710 401 04	DIODE MA8039-H	
C1107 C1108	1-124-477-11 1-124-907-11		20% 20%	16V 50V	D2 D6	8-719-047-41	DIODE UMZ12N-T146	
C1110	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	D7		DIODE MA113-TX	
C1111	1-164-489-11	CERAMIC CHIP 0.22MF	10%	16V	D9 D11		DIODE MA113-TX DIODE MA113-TX	
C1112	1-164-489-11	CERAMIC CHIP 0.22MP	10%	16V	2101		DIODE DTZ338	
C1113 C1117	1-163-137-00	CERAMIC CHIP 680PF CERAMIC CHIP 0.1MF	5% 10%	50V 25V	D101 D102		DIODE DAN202K-T-147	
C1118	1-124-477-11	ELECT 47MF	20%	16V	2103	0 710 014 42	(KV-X2900B/X2901B) DIODE DAN202K-T-147	
C1119	1-124-477-11	ELECT 47MF	20%	16V	D103	8-719-914-43	(KV-X2901D/X2900B/X2901B/	(X2901K)
C1120	1-163-137-00	CERAMIC CHIP 680PF	5%	50V	D201	0 710 000 76	DIODE DA204K-T-147	
C1122 C1123	1-124-477-13	L ELECT 47MF L CERAMIC CHIP 0.1MF	20% 10%	16V 25V	D201	0-/13-000-/0	(KV-X2901D/X2901A/X2900B/	/X2901B
C1124	1-164-004-1	CERAMIC CHIP 0.1MF	10%	25V	D201	0 710 041 07	X2903E/X2901K) DIODE MA113-TX	
C1125	1-165-320-1	CERAMIC CHIP 0.47MF	10%	16V	D301 D302	8-719-041-97	DIODE MA113-TX	
C1126	1-163-117-0	CERAMIC CHIP 100PF	5%	50V	D202	0_710_0/1_07	DIODE MA113-TX	
C1127 C1128	1-163-117-0 1-163-037-1	CERAMIC CHIP 100PF CERAMIC CHIP 0.022MF	5% 10%	50V 25V	D303 D304	8-719-041-97	DIODE MA113-TX	
C1129	1-162-568-1	1 CERAMIC CHIP 0.33MF		25 V	D305		DIODE MA113-TX	
C1130	1-124-903-1	1 ELECT 1MF	20%	50V	D314 D380		DIODE BAS216 DIODE MA113-TX	
C1131	1-164-004-1	1 CERAMIC CHIP 0.1MF	10%	25V			DIODE UMZ12N-T146	
C1132 C1133	1-164-004-1 1-124-477-1	1 CERAMIC CHIP 0.1MF 1 ELECT 47MF	10% 20%	25V 16V	D401 D402	8-719-047-41	DIODE UMZ12N-T146	
C1134	1-124-907-1	1 ELECT 10MF	20%	50V	D404	8-719-047-41	DIODE UMZ12N-T146	
C1135	1-163-125-0	0 CERAMIC CHIP 220PF	5%	50V	D405	8-719-047-41	DIODE UMZ12N-T146	



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D406	8-719-047-41	DIODE UMZ12N-T146		L108	1-412-008-11	INDUCTOR CHIP 15UH (KV-X2901D/X2901A/X2903	P/Y2901#\
D407 D408 D409	8-719-047-41 8-719-047-41	DIODE UMZ12N-T146 DIODE UMZ12N-T146 DIODE UMZ12N-T146			1-412-011-31	INDUCTOR CHIP 27UH (KV-X2900B/X2901B)	B) REJULK
D410 D411		DIODE UMZ12N-T146 DIODE UMZ12N-T146		L109 L110 L201		INDUCTOR CHIP 68UH INDUCTOR CHIP 6.8UH INDUCTOR 4.7MMH	
D1002	8-719-023-25	DIODE MA704WK (KV-X2901D/X2901A/X2901B X2903E/X2902U/X2902L/X2901K)		L304	1-412-006-31	(KV-X2901D/X2901A/X2900 X2903E/X2901K) INDUCTOR CHIP 10UH	B/X2901B
D1003	8-719-976-84			L305 L306	1-412-006-31 1-412-006-31	INDUCTOR CHIP 10UH INDUCTOR CHIP 10UH	
D1101	8-719-041-97	DIODE MA113-TX (KV-X2903E/X2902U/X2902L)		L307 L308 L309	1-408-609-41 1-408-424-00 1-408-424-00	INDUCTOR 180UH	
D1102	8-719-820-71	DIODE 1SV214 (KV-X2903E/X2902U/X2902L)		L310	1-408-407-00	INDUCTOR 6.8UH	
	< IC	>		L401 L1001	1-410-214-31 1-408-419-00	INDUCTOR CHIP 68UH INDUCTOR 68UH (KV-X2901D/X2901A/X2901	R
IC001 IC002		IC CAT24C16J-TE13				X2903E/X2902U/X2902L/X	
IC101 IC201	8-759-193-14 8-759-252-14	IC TDA9814T IC TDA6612-X-GEG		L1002	1-408-419-00	(KV-X2901D/X2901A/X2901	
10201		(KV-X2901D/X2901A/X2900B/X2901 X2903E/X2901K)	В	L1101	1-412-004-31	X2903E/X2902U/X2902L/X INDUCTOR CHIP 6.8UH (KV-X2903E/X2902U/X2902	
	8-759-252-12	IC TDA6622-X-GEG (KV-X2902U/X2902L)		T101	1-403-686-21	COIL	-,
IC202	8-759-514-57	IC BA7046F			< TRA	NSISITOR >	
IC301 IC302	8-759-251-57	IC TDA8366T IC TDA4661T/V2		Q4 Q5		TRANSISTOR DTC144EK TRANSISTOR 2SA1162-G	
IC303	8-759-251-56			Q8		TRANSISTOR 2SC2412K-QR	
		(KV-X2901D/X2900B/X2901B/X2901	.K)	Q11 Q12	8-729-920-74	TRANSISTOR 2SC2412K-QR TRANSISTOR 2SC2412K-QR	
IC401	8-752-069-53			•		•	
IC1001	8-759-252-08	IC CF72306DW-R (KV-X2901D/X2901A/X2901B		Q14		TRANSISTOR 2SC2412K-QR	
		X2903E/X2902U/X2902L/X2901K)		Q102 Q103		TRANSISTOR 2SC3355 TRANSISTOR DTC114EK	
IC1002	8-759-252-10	IC CF70200FN-R (RV-X2901D/X2901A/X2901B X2903E/X2902U/X2902L/X2901R)		Q104	8-729-900-53	(KV-X2900B/X2901B) TRANSISTOR DTC114EK	
IC1003	0 750 200 71	IC HD14053BFP		Q105		TRANSISTOR DTC114EK	
101003	0-759-300-71	(KV-X2901D/X2901A/X2901B		Q107 Q108		TRANSISTOR 2SC2412K-QR TRANSISTOR IMX1	
IC1101	8-759-251-58	X2903E/X2902U/X2902L/X2901K)		Q109 Q114	8-729-907-26	TRANSISTOR IMX1 TRANSISTOR 2SC2412K-QR	
	< SOC	KET >		Q116	8-729-901-01	TRANSISTOR DTC144EK (KV-X2901D/X2900B/X2901	B/X2901K)
J401	1-766-296-11	CONNECTOR, DUAL SCART		Q117	8-729-901-01	TRANSISTOR DTC144EK (KV-X2901D/X2900B/X2901	n/wanatw)
0101	< COI			Q120	8-729-216-22	TRANSISTOR 2SA1162-G	B/A29U1K)
L1	1-412-010-41	INDUCTOR CHIP 22UH		0121	8-729-216-22	TRANSISTOR 2SA1162-G (KV-X2900B/X2901B)	
L101	1-408-609-41	INDUCTOR 33UH		Q123		TRANSISTOR DTC144EK	
L102 L103	1-408-419-00			Q124 Q125		TRANSISTOR DTC144EK TRANSISTOR DTC114EK (KV-X2900B/X2901B)	
L105	1-412-008-11	INDUCTOR CHIP 15UH (KV-X2901D/X2901A/X2903B/X2902 X2902L/X2901K)	σ	Q130 Q131		TRANSISTOR 2SC2412K-QR TRANSISTOR 2SA1162-G	
	1-412-005-11	INDUCTOR CHIP 8.2UH		Q132	8-729-920-74	TRANSISTOR 2SC2412K-QR	
L106	1_412_011_21	(KV-X2900B/X2901B) INDUCTOR CHIP 27UH		Q133 Q304		TRANSISTOR 2SC2412K-QR TRANSISTOR 2SC2412K-QR	
L107		INDUCTOR CHIP 270H INDUCTOR CHIP 0.22UH		Q312 Q313		TRANSISTOR 2SC2412K-QR TRANSISTOR 2SC2412K-QR	



REF.NO.	PART NO.	DESCRIPTION		REMARK	REF.NO.	PART NO.	DESCRIPTIO	N		REM/	ARK
Q314	8-729-900-53	TRANSISTOR DTC114	EK		JR124	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q380 Q381	8-729-920-74 8-729-920-74	TRANSISTOR 2SC241 TRANSISTOR 2SC241	2K-QR		JR125	1-216-295-00	METAL GLAZE (KV-X2901A/X2		5%	1/10W	
Q301	0 125 520 14	114210101011			JR126	1-216-295-00	METAL GLAZE		5%	1/10W	
Q401	8-729-920-74	TRANSISTOR 2SC241			JR127	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q402	8-729-920-74						(KV-X2902L)				
Q403	8-729-920-74	TRANSISTOR 2SC241			TD 2.0.1	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q404	8-729-920-74	TRANSISTOR 2SC241 TRANSISTOR 2SC241			JR201	1-216-293-00	(KV-X2901D/X2	-			
Q1001	8-729-920-74	(KV-X2901D/X2901A					X2901K)	.,	.,,,,,	,	
		X2903E/X2902U/X2			JR202	1-216-295-00	METAL GLAZE	0	5%	1/10W	
							(KV-X2901D/X2	2901A/X2	2900B/	X2901B	
Q1003	8-729-216-22	TRANSISTOR 2SA116					X2901K)				
		(KV-X2901D/X2901A			JR401	1-216-295-00	METAL GLAZE	0	5%	1/10W	
		X2903E/X2902U/X2	902L/A2	301K)	0.401	1-210-253-00	(KV-X2900B)	•	J.	1, 1011	
	< RES	SISTOR >			JR402	1-216-295-00		0	5%	1/10W	
	1.00	,10101.					(KV-X2900B)				
JR3	1-216-295-00	METAL GLAZE 0	5%	1/10W	JR403	1-216-295-00		0	5%	1/10W	
JR8	1-216-295-00	METAL GLAZE 0	5%	1/10W		1 216 205 00	(KV-X2900B) METAL GLAZE	0	5%	1/10W	
JR9	1-216-295-00	METAL GLAZE 0	5%	1/10W	JR408	1-216-295-00	METAL GLAZE	U	3%	1/100	
JR10 JR12	1-216-295-00 1-216-295-00	METAL GLAZE 0 METAL GLAZE 0	5% 5%	1/10W 1/10W	JR1004	1-216-295-00	METAL GLAZE	0	5%	1/10W	
UKIZ	1-210-293-00	MEIAH GHADE V	3.0	1/ 1011	0.1.2001	2 220 200 00	(KV-X2901D/X	2901A/X2	2901B		
JR13	1-216-295-00	METAL GLAZE 0	5%	1/10W			X2903E/X290	2U/X2902	2L/X29	901K)	
JR14	1-216-295-00	METAL GLAZE 0	5%	1/10W			WEEDLY OF LEE	220	EQ.	1/10W	
JR15	1-216-295-00	METAL GLAZE 0	5%	1/10W	R21 R24	1-216-033-00 1-216-049-00		220 1K	5% 5%	1/10W	
JR16	1-216-295-00 1-216-295-00	METAL GLAZE 0 METAL GLAZE 0	5% 5%	1/10W 1/10W	R25	1-216-073-00		10K	5%	1/10W	
JR17	1-210-295-00	MEIAU GUADA V	2.0	1/104	R26	1-216-025-00		100	5%	1/10W	
JR18	1-216-295-00	METAL GLAZE 0	5%	1/10W	R27	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
JR19	1-216-295-00	METAL GLAZE 0	5%	1/10W		4 445 444 44		1 77	F0.	1 /1 014	
JR20	1-216-296-91		5%	1/8W	R29	1-216-049-00 1-216-049-00		1K 1K	5% 5%	1/10W 1/10W	
JR22	1-216-296-91		5% 5%	1/8W 1/10W	R31 R33	1-216-063-00		3.9K	_	1/10W	
JR25	1-216-295-00	METAL GRAZE V	7.0	1/104	R35	1-216-065-00		4.7K	5%	1/10W	
JR28	1-216-296-91	METAL GLAZE 0	5%	1/8W	R40	1-216-045-00	METAL GLAZE	680	5%	1/10W	
JR53	1-216-296-91	METAL GLAZE 0	5%	1/8W		4 046 082 00		107	F0.	1 /1 01/	
JR54		METAL GLAZE 0	5%	1/8W	R41 R43	1-216-073-00 1-216-295-00		10K 0	5% 5%	1/10W 1/10W	
JR55 JR56	1-216-296-91 1-216-296-91		5% 5%	1/8W 1/8W	R44	1-216-121-00		1M	5%	1/10W	
OCAU	1-210-230-31	MEINI GINZE	3.0	17011	R46	1-216-049-00		1K	5%	1/10W	
JR57	1-216-296-91	METAL GLAZE 0	5%	1/8W	R49	1-216-041-00	METAL GLAZE	470	5%	1/10W	
JR58	1-216-296-91	METAL GLAZE 0	5%	1/8W		1 016 010 00		177	ro.	1 /1 014	
JR59	1-216-296-91	_	5%	1/8W	R50 R59	1-216-049-00	METAL GLAZE METAL GLAZE	1K 1M	5% 5%	1/10W 1/10W	
JR60	1-216-296-91		5% 5%	1/8W 1/8W	R60	1-216-025-00	METAL GLAZE	100		1/10W	
JR61	1-210-290-91	METAL GLAZE 0	2.0	1/01	R61		METAL GLAZE	100	5%	1/10W	
JR62	1-216-296-91	METAL GLAZE 0	5%	1/8W	R70	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
JR63	1-216-296-91	METAL GLAZE 0	5%	1/8W		4 444 404 40		00#	ro.	1 /10%	
JR64		METAL GLAZE 0	5%	1/8W	R71	1-216-081-00 1-216-081-00		22K 22K	5% 5%	1/10W 1/10W	
JR65		METAL GLAZE 0 METAL GLAZE 0	5% 5%	1/8W 1/8W	R72 R73	1-216-025-00		100	5%	1/10W	
JR66	1-210-230-31	METAL GLAZE 0	24	1/04	R75		METAL GLAZE	22K	5%	1/10W	
JR67	1-216-296-91	METAL GLAZE 0	5%	1/8W	R76		METAL GLAZE	10K	5%	1/10W	
JR68	1-216-296-91	METAL GLAZE 0	5%	1/8W				4		4 /4 027	
JR69	1-216-296-91	METAL GLAZE 0	5%	1/8W	R77		METAL GLAZE	4.7K		1/10W	
JR70	1-216-296-91	METAL GLAZE 0	5%	1/8W	R78 R79	1-216-037-00 1-216-065-00		330 4.7K	5% 5%	1/10W 1/10W	
JR71	1-216-296-91	METAL GLAZE 0	5%	1/8W	R82	1-216-073-00		10K	5%	1/10W	
JR72	1-216-296-91	METAL GLAZE 0	5%	1/8W	R83	1-216-065-00		4.7K	5%	1/10W	
JR73	1-216-296-91	METAL GLAZE 0	5%	1/8W						4 44 4	
JR74	1-216-296-91	METAL GLAZE 0	5%	1/8W	R84	1-216-065-00		4.7K		1/10W	
JR113		METAL GLAZE 0	5%	1/10W	R85	1-216-025-00		100 100	5% 5%	1/10W 1/10W	
JR120	1-216-295-00	METAL GLAZE 0	5%	1/10W	R86 R87	1-216-025-00 1-216-073-00		10K	5%	1/10W	
JR122	1-216-205-00	METAL GLAZE 0	5%	1/10W	R88	1-216-075-00			5%	1/10W	
OKT27	1-410-433-00	(KV-X2901D/X2901		_, _ ,							
		X2902L/X2901K)			R89	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
JR123	1-216-295-00	METAL GLAZE 0	5%	1/10W	R90		METAL GLAZE	10K	5% 5%	1/10W 1/10W	
		(KV-X2901D/X2901	A/X2903	E/X29020	R91	1-216-049-00	METAL GLAZE	1K	20	T/ TOM	
		X2902L/X2901K)									



REF.NO.	PART NO.	DESCRIPTIO	N		REMAR	K REF.NO.	PART NO.	DESCRIPTION	ON		REMARK	<u>(</u>
R92 R93	1-216-049-00 1-216-049-00	METAL GLAZE METAL GLAZE	1K 1K	5% 5%	1/10W 1/10W	R152 R153	1-216-023-00 1-216-057-00	METAL GLAZE METAL GLAZE	82 2.2K	5% 5%	1/10W 1/10W	
R94	1-216-049-00	METAL GLAZE	1K	5%	1/10W	R154	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R95	1-216-049-00		1K	5%	1/10W	R155	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R96	1-216-071-00		8.2K		1/10W	R156	1-216-073-00		10K	5%	1/10W	
R97 R99	1-216-049-00 1-216-049-00		1K 1K	5% 5%	1/10W 1/10W	R157 R158	1-216-295-00		0	5%	1/10W	
						KIDO	1-216-075-00	METAL GLAZE (KV-X2901D/X	12K 2901A/X	5% (2903B	1/10W 3/X2901K)	
R101 R102	1-216-081-00 1-216-083-00		22K	5%	1/10W	2160	1 016 040 00		4		4.44.000	
R103	1-216-083-00		27K 15K	5% 5%	1/10W 1/10W	R160 R161	1-216-049-00 1-216-049-00		1K 1K	5% 5%	1/10W	
R104	1-216-073-00		10K	5%	1/10W	R162	1-216-017-00		47	5%	1/10W 1/10W	
R105	1-216-025-00	METAL GLAZE	100	5%	1/10W	R163	1-216-049-00		1K	5%	1/10W	
-400						R164	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R106	1-216-025-00		100	5%	1/10W	2165	4 045 000 04					
R107 R108	1-216-059-00 1-216-067-00		2.7K 5.6K		1/10W 1/10W	R165 R166	1-216-089-91	METAL GLAZE	47K	5%	1/10W	
R109	1-216-176-00		120	5%	1/8W	R170	1-216-097-00 1-216-073-00		100K 10K	5% 5%	1/10W 1/10W	
R110	1-216-057-00		2.2K		1/10W	R171	1-216-035-00	METAL GLAZE	270	5%	1/10W	
						R172	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R111	1-216-057-00		2.2K	5%	1/10W							
R112 R113	1-216-065-00 1-216-073-00		4.7K	5% 5%	1/10W 1/10W	R173	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R114	1-216-073-00		10K	5%	1/10W	R174 R180	1-216-061-00 1-216-295-00		3.3K 0	5% 5%	1/10W 1/10W	
R115	1-218-755-11		130K		1/10W	R182	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
						R183	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R116	1-216-113-00		470K		1/10W							
R117 R118	1-216-057-00 1-216-107-00		2.2K 270K		1/10W 1/10W	R185	1-216-071-00		8.2K	5%	1/10W	
R119	1-216-049-00		1K	5%	1/10W 1/10W	R186 R192	1-216-059-00 1-216-033-00		2.7K 220	5% 5%	1/10W 1/10W	
R120	1-216-037-00	METAL GLAZE	330	5%	1/10W	R195	1-216-113-00	METAL GLAZE	470K	5%	1/10W 1/10W	
						R196	1-216-013-00	METAL GLAZE	33	5%	1/10W	
R121	1-216-037-00		330	5%	1/10W							
R122 R123	1-216-089-91 1-216-089-91		47K	5%	1/10W	R197	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R124	1-216-039-91		47K 390	5% 5%	1/10W 1/10W	R198 R199	1-216-017-00 1-216-037-00	METAL GLAZE METAL GLAZE	47 330	5% 5%	1/10W 1/10W	
R125	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	1133	1-210-037-00	(KV-X2901D/X	2901A/X			
							1-216-041-00	METAL GLAZE	470	5%	1/10W	
R126	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W			(KV-X2900B/X	2901B)			
R127 R128	1-216-041-00 1-216-043-00		470 560	5% 5%	1/10W 1/10W	P201	1 216 052 00	MOMENT OF LED	1 5-	CO.	4 /4 022	
R130	1-216-043-00		560	5%	1/10W	R201 R202	1-216-053-00 1-216-091-00	METAL GLAZE METAL GLAZE	1.5K 56K	5% 5%	1/10W 1/10W	
R131	1-216-043-00		560	5%	1/10W	R203	1-216-067-00	METAL GLAZE	5.6K		1/10W	
-4-4						R204	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R134	1-216-057-00	METAL GLAZE (KV-X2901D/X2	2.2K		1/10W ¥2901¥)	R205	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R135	1-216-057-00		2.2K		1/10W	R206	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
		(KV-X2901D/X2				R207	1-216-049-00		1K	5%	1/10W	
R136	1-216-085-00	METAL GLAZE	33K	5%	1/10W	R210	1-216-025-00		100	5%	1/10W	
R137	1 216 005 00	MDM31 OT 377	225	FQ.	1 /1 07/2	R211	1-216-025-00		100	5%	1/10W	
R137	1-216-085-00 1-216-069-00		33K 6.8K	5% 5%	1/10W 1/10W	R213	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R140	1-216-093-00		68K	5%	1/10W	R311	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R141	1-216-069-00	METAL GLAZE	6.8K		1/10W	R313	1-216-025-00		100	5%	1/10W	
R142	1-216-093-00	METAL GLAZE	68K	5%	1/10W	R314	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R143	1 216 057 00	WEEKL OLIGE	2 25	EO.	1 /1 014	R315	1-216-025-00	METAL GLAZE	100	5%	1/10W	
VT#1	1-216-057-00	(KV-X2901D/X2	2.2K		1/10W ¥2901K)	R316	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R144	1-216-059-00		2.7K		1/10W	R317	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R145	1-216-059-00		2.7K		1/10W	R318	1-216-049-00		1K	5%	1/10W	
R146	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R319	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R147	1 216 225 20	ACTURNIZ OF SER	272	F0.	1 /1 022	R320			100	5%	1/10W	
VT#1	1-216-035-00	METAL GLAZE (KV-X2901D/X2	270 901a/x	5% 2903R/	1/10W x2902H	R321	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		X2902L/X2901		27VJE/.	AM J V & V	R322	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
	1-216-029-00		150	5%	1/10W	R323	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
		(KV-X2900B/X2	901B)			R325	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R148	1 116 057 00	NEMAL CLASS	2 2*	E0.	1 /1 022	R326			15K	5%	1/10W	
R149	1-216-057-00 1-216-065-00		2.2K 4.7K		1/10W 1/10W	R327	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R151	1-216-081-00		22K	5%	1/10W 1/10W	R328	1-216-295-00	METAL GLAZE	0	5%	1/10W	
								vanuu	•	J-0	1/ 1011	



REF.NO.	PART NO.	DESCRIPTION	l		REMARK	REF.NO.	PART NO.	DESCRIPTION	١		REMA	ARK
R329 R330	1-216-073-00 1-216-295-00	METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R437 R438	1-216-073-00 1-216-089-91	METAL GLAZE	10K 47K	5% 5%	1/10W 1/10W	
R331 R332	1-216-295-00 1-216-295-00	METAL GLAZE METAL GLAZE	0	5% 5%	1/10W 1/10W	R439 R440	1-216-071-00 1-216-025-00	METAL GLAZE	8.2K 100	5% 5% 5%	1/10W 1/10W	
R333	1-216-689-11	METAL CHIP METAL GLAZE		0.50% 5%	1/10W 1/10W	R441 R442	1-216-022-00 1-216-067-00	METAL GLAZE METAL GLAZE	75 5.6K	5%	1/10W	
R340 R341	1-216-097-00 1-216-083-00		27K	5%	1/10W	R443	1-216-113-00	METAL GLAZE		5%	1/10W	
R342 R352	1-216-073-00 1-216-123-11	METAL GLAZE METAL GLAZE	10K 1.2M	5% 5%	1/10W 1/10W	R444 R445	1-216-067-00 1-216-113-00	METAL GLAZE METAL GLAZE	470K	5% 5%	1/10W 1/10W	
R354	1-216-025-00	METAL GLAZE	100	5%	1/10W	R446 R447	1-216-025-00 1-216-025-00	METAL GLAZE	100 100	5% 5%	1/10W 1/10W	
R355 R356	1-216-065-00 1-216-025-00	METAL GLAZE	4.7K 100	5% 5%	1/10W 1/10W	R448	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R364	1-216-023-00	METAL GLAZE	470	5%	1/10W	R449	1-216-071-00	METAL GLAZE METAL GLAZE	8.2K 47K	5% 5%	1/10W 1/10W	
R365	1-216-025-00	METAL GLAZE	100	5%	1/10W	R454	1-216-089-91	METAL GLAZE	4/10			
R370	1-216-033-00	METAL GLAZE	220	5%	1/10W	R458	1-216-049-00 1-216-022-00		1K 75	5% 5%	1/10W 1/10W	
R371	1-216-033-00		220 220	5% 5%	1/10W 1/10W	R461 R464	1-216-049-00		1K	5%	1/10W	
R372 R373	1-216-033-00 1-216-041-00	METAL GLAZE METAL GLAZE	470	5%	1/10W	R465	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R380	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R466	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R381	1-216-025-00	METAL GLAZE	100	5%	1/10W	R473	1-216-022-00		75	5%	1/10W	
R382	1-216-053-00	METAL GLAZE	1.5K		1/10W	R474	1-216-009-00 1-216-073-00	METAL GLAZE METAL GLAZE	22 10K	5% 5%	1/10W 1/10W	
R383	1-216-049-00		1K 1.5K	5% 5%	1/10W 1/10W	R482 R483	1-216-051-00		1.2K		1/10W	
R384 R385	1-216-053-00 1-216-049-00		1K	5%	1/10W		. P1	001 - R1028 FI	መመደብ ብሄ			
	1 216 222 22	METAL GLAZE	82	5%	1/10W		< KV-X29	001 - K1026 F1	01B/X2	903E>		
R386 R387	1-216-023-00 1-216-023-00		82	5%	1/10W		<1	(2902U/X2902L/X	(2901K>			
R388	1-216-033-00	METAL GLAZE	220	5%	1/10W	R1001	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R389	1-216-033-00		220 330K	5% 5%	1/10W 1/10W	R1001	1-216-025-00		100	5%	1/10W	
R390	1-216-109-00	METAL GUALE	330K	3.0		R1004	1-216-049-00		1K	5% 5%	1/10W 1/10W	
R392	1-216-091-00		56K	5% 5%	1/10W 1/10W	R1005	1-216-073-00	METAL GLAZE	10K	3%	1/104	
R393 R401	1-216-089-91 1-216-039-00		47K 390	5%	1/10W	R1008	1-216-085-00		33K	5%	1/10W	
R402	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R1009	1-216-025-00 1-216-053-00		100 1.5K	5% 5%	1/10W 1/10W	
R403	1-216-039-00	METAL GLAZE	390	5%	1/10W	R1010 R1011	1-216-053-00		1.5K		1/10W	
R404	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R1012	1-216-053-00		1.5K	5%	1/10W	
R405	1-216-039-00	METAL GLAZE	390	5%	1/10W	R1014	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R406	1-216-039-00		390 5.6K	5% 5%	1/10W 1/10W	R1015	1-216-025-00		100	5%	1/10W	
R408 R409	1-216-067-0		5.6K		1/10W	R1016	1-216-049-00		1K	5%	1/10W 1/10W	
			400	F0.	1 /1 0%	R1019 R1020	1-216-049-00) METAL GLAZE) METAL GLAZE	1K 22K	5% 5%	1/10W	
R410 R413	1-216-025-0	O METAL GLAZE O METAL GLAZE	100 220	5% 5%	1/10W 1/10W	K1020						
R415	1-216-067-0	0 METAL GLAZE	5.6K		1/10W	R1021	1-216-065-00	METAL GLAZE	4.7K	5% 5%	1/10W 1/10W	
R417	1-216-033-0	O METAL GLAZE	220	5%	1/10W 1/10W	R1023 R1024	1-216-023-00) METAL GLAZE) METAL GLAZE	82 82	5%	1/10W	
R419	1-216-067-0	0 METAL GLAZE	3.01	5%	1/10#	R1025	1-216-035-0) METAL GLAZE	270	5%	1/10W	
R420	1-216-009-0	0 METAL GLAZE	22	5%	1/10W	R1026	1-216-035-0) METAL GLAZE	270	5%	1/10W	
R421	1-216-113-0	0 METAL GLAZE		5%	1/10W 1/10W	R1027	1-216-035-0	O METAL GLAZE	270	5%	1/10W	
R422 R423	1-216-022-0	0 METAL GLAZE 0 METAL GLAZE	75 68K	5% 5%	1/10W	R1028	1-216-023-0	0 METAL GLAZE		5%	1/10W	
R424	1-216-113-0	0 METAL GLAZE	470K	5%	1/10W		, D	1101 - R1118 F	מאייייז ח	N >		
R425	1_216_022=0	0 METAL GLAZE	75	5%	1/10W		X>	V-X2903E/X2902	U/X2902	L>		
R426	1-216-025-0	0 METAL GLAZE	100	5%	1/10W	P1101	1 216 025 0	0 METAL GLAZE	100	5%	1/10W	
R427	1-216-188-0	0 METAL GLAZE	390	5% 5%	1/8W 1/10W	R1101 R1102		0 METAL GLAZE		5%	1/10W	
R429 R430	1-216-067-0	0 METAL GLAZE 1 METAL GLAZE			1/10W	R1103	1-220-149-1	1 METAL GLAZE	2.2	10%	1/2W	
					1 /OW	R1104		0 METAL GLAZE 0 METAL GLAZE		5% 5%	1/10W 1/10W	
R431 R432	1-216-188-0	00 METAL GLAZE 00 METAL GLAZE	390	5% 5%	1/8W 1/10W	R1105						
R432 R433	1-216-067-0	0 METAL GLAZE	5.61	5%	1/10W	R1106		0 METAL GLAZE		5% 5%	1/10W 1/10W	
R434	1-216-025-0	0 METAL GLAZE	100		1/10W	R1107 R1108	1-216-049-0	0 METAL GLAZE 0 METAL GLAZE	1K 1M	5% 5%	1/10W	
R435	1-216-039-0	00 METAL GLAZE	390	5%	1/10W	R1109	1-216-121-0	0 METAL GLAZE	1M	5%	1/10W	
R436	1-216-022-0	00 METAL GLAZE	75	5%	1/10W	R1110		1 METAL GLAZE		5%	1/4W	



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REF.NO.	PART NO.	DESCRIPTION	REMA	RK F	REF.NO.	PART NO.	DESCRIPTIO	<u>N</u>			REMARK
R1111 R1112 R1113 R1114 R1115	1-216-025-00 1-216-025-00 1-216-117-00 1-216-158-00 1-216-121-00	METAL GLAZE 680K 5% METAL GLAZE 22 5%	1/10W 1/10W 1/8W	I	0701 0702 0706	8-719-901-33 8-719-901-33	DIODE RD9.1ES DIODE 1SS133 DIODE 1SS133	SB3			
R1116 R1117 R1118	1-216-081-00 1-216-073-00 1-220-149-11	METAL GLAZE 10K 5%	1/10W	I	0707 0708 0709	8-719-901-33 8-719-901-33					
		RIABLE RESISTOR >		I	0710 0711 0713	8-719-901-33 8-719-302-43	DIODE 1SS133				
RV102	1-241-765-11	RES, ADJ, CARBON 22K (KV-X2900B/X2901B)				< JAC					
	< RES	SISTOR NETWORK >		and special	1701 Δ	1-526-990-21	SOCKET, CRT	Section 1	April 10	[[4]]	manage at the general and group of the control of t
RA1 RA2 RA3	1-236-908-11	RESISTOR, NETWORK (CHI RESISTOR, NETWORK (CHI RESISTOR, NETWORK (CHI	P TYPE)		.704	< COI		2200			
RA7 RA8	1-236-908-11	RESISTOR, NETWORK (CHI NETWORK, RESISTOR (CHI	P TYPE)	1	1/ 04	1-408-609-41	NSISTOR >	33UH			
RA9 RA10 RA11	1-236-908-11	NETWORK, RESISTOR (CHI RESISTOR, NETWORK (CHI RESISTOR, NETWORK (CHI	P TYPE)	0	2702 2703 2704 2705	8-729-906-70 8-729-200-17 8-729-173-38	TRANSISTOR 2S TRANSISTOR BE TRANSISTOR 2S TRANSISTOR 2S	871 8A1091-0 8A733-K			
	< 105	NEK >		2	706	8-729-906-70	TRANSISTOR BE	7871			
TU101		TUNER UV-916H (KV-X2901D/X2901A/X290 X2903E/X2902L/X2901K)		0	2707 2708 2709	8-729-173-38 8-729-906-70	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR BE	SA733-K P871			
	1-093-184-11	TUNER UV944C (KV-X2902U)		Q	2710		TRANSISTOR 2S	A1091-0			
	< CRY	STAL >				< VE9	1910% >				
X2 X301 X1001	1-760-331-11	VIBRATOR, CERAMIC VIBRATOR, CRYSTAL OSCILLATOR, CRYSTAL (XV-X2901D/X2901A/X290		R R	1706 1707	1-216-486-00 1-202-824-00 1-249-409-11 1-249-408-11 1-249-399-11	SOLID CARBON CARBON	180	10% 5% 5%	3W 1/2W 1/4W 1/4W 1/4W	F
X1101	1-579-689-21	X2903E/X2902U/X2902L/ VIBRATOR, CRYSTAL (KV-X2903E/X2902U/X290	· ·		1709 1711	1-202-844-00 1-249-423-11		330K 1		1/2W 1/4W	
				R	712	1-202-824-00	SOLID	3.3K 1	10%	1/2W	
*******		C BOARD, COMPLETE	**********	1		1-216-486-00 1-249-417-11		8.2K 5		3W 1/4W	F
		******		R		1-249-409-11 1-249-408-11	CARBON			1/4W 1/4W	
	< CAF	PACITOR >				1-202-814-11 1-249-399-11				1/2W	
C702 C703	1-102-824-00 1-102-824-00	CERAMIC 470PF	5% 50V 5% 50V	R	720	1-249-423-11	CARBON	3.3K 5	5%	1/4W 1/4W	
C704 C706	1-102-116-00 1-102-116-00		10% 50V 10% 50V	l l	1722 1723	1-202-848-00 1-249-417-11		680K 1		1/2W 1/4W	
C707	1-162-116-00		10% 2KV		724	1-202-846-00		470K 1		1/2W	
C708 C709	1-162-114-00 1-102-116-00		2KV 10% 50V			1-202-824-00 1-249-409-11		3.3K 1 220 5	10%	1/2W 1/4W	
C710	1-123-947-00	ELECT 10MF	20% 250V			1-216-350-11			5%	1W	F
C712 C714	1-102-824-00		5% 50V			1-249-408-11		180 5		1/4W	
	1-124-360-00	ELECT 1000MF	20% 16V			1-249-399-11 1-249-423-11		33 5 3.3K 5		1/4W 1/4W	
C717 C718	1-102-114-00 1-102-114-00	CERAMIC 470PF	10% 50V 10% 50V	R	734	1-247-807-31	CARBON	100 5	5%	1/4W	
C719	1-102-114-00 < CON	CERAMIC 470PF INECTOR >	10% 50V	R	739	1-216-486-00 1-249-417-11 1-202-842-11	CARBON	8.2K 5 1K 5 220K 1	%	3W 1/4W 1/2W	F
				, n	1.43	1-202-042-11	מדווחפ	42UN 1	.სზ .	1/2W	
CN702 CN703	1-695-915-11 *1-568-882-51	TAB (CONTACT) PIN, CONNECTOR 7P									

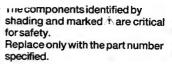
The components identified by shading and marked in are critical for safety.

Replace only with the part number specified.





REF.NO.	PART NO.	DESCRIPTION	DN		REMARK	REF.NO.	PART NO.	DESCRIPTI	ON		REMARK
	< VAR	IABLE RESISTO	R >			C632 C633 A	1-124-120-11 1-107-564-11	FILM	220MF 0.22MF	20% 20%	25V 300V
RV701 RV702		RES, ADJ, ME RES, ADJ, ME				C634 A	1-107-564-11	FILM	0.22MF	20%	300V
	1-241-030-11				******	C636 A	1-107-564-11 1-164-246-51	CERAMIC	0.22MF 0.0022MF	20% 20%	300V 400V
	*A-1642-115-A	D BOARD, COM				C639 C640 C800	1-136-165-00 1-106-220-00 1-137-431-11	MYLAR	0.1MF 0.1MF 560PF	5% 10% 5%	50V 100V 50V
	4-202-373-01	SPACER, INSU SPRING, IC RIVET NYLON,				C801 C804 C805 C806	1-136-153-00 1-136-165-00 1-106-395-00 1-108-704-11	FILM MYLAR	0.01MF 0.1MF 0.15MF 0.1MF	5% 5% 10% 10%	50V 50V 200V 200V
	< CAF	PACITOR >				C807	1-136-540-11	FILM	0.82MF	5%	200V
C502 C503 C504 C506 C507	1-102-824-00 1-136-165-00 1-102-824-00 1-124-480-11 1-124-767-00	FILM CERAMIC ELECT	470PF 0.1MF 470PF 470MF 2.2MF	5% 5% 5% 20% 20%	50V 50V 50V 25V 50V	C810 C811 C812 C813 C814	1-123-944-00 1-102-212-00 1-136-112-00 1-129-722-00 1-136-591-11	CERAMIC FILM FILM	2.2MF 820PF 1.4MF 0.047MF 0.017MF	20% 10% 5% 10% 3%	250V 500V 200V 630V 1.4KV
C509 C510 C511 C513 C514	1-136-165-00 1-124-911-11 1-136-202-11 1-106-228-00 1-136-165-00	ELECT FILM MYLAR	0.1MF 220MF 0.33MF 0.22MF 0.1MF	5% 20% 5% 10% 5%	50V 50V 63V 100V 50V	C815 C816 C817 C818 C819	1-136-562-11 1-161-754-00 1-161-754-00 1-162-134-11 1-136-208-11	CERAMIC CERAMIC CERAMIC	0.0082MF 0.001MF 0.001MF 470PF 0.068MF	10% 10% 10% 10% 10%	400V 2KV 2KV 2KV 250V
C515 C517 C518 C519 C520	1-124-480-11 1-124-480-11 1-102-228-00 1-102-228-00 1-124-480-11	ELECT CERAMIC CERAMIC	470MF 470MF 470PF 470PF 470MF	20% 20% 10% 10% 20%	25V 25V 500V 500V 25V	C820 C821 C822 C824 C829	1-102-114-00 1-162-114-00 1-123-948-00 1-123-024-21 1-124-902-00	CERAMIC ELECT ELECT	470PF 0.0047MF 22MF 33MF 0.47MF	10% 20% 20%	50V 2KV 250V 160V 50V
C601 A	1-124-006-11 1-124-907-11 1-161-742-00 1-161-964-91 1-161-964-91	ELECT CERAMIC CERAMIC	10MF 10MF 0.0022MF 0.0047MF 0.0047MF	20% 20% 20%	25V 50V 400V 250V 250V	C830 C832 C834 C835 C836	1-124-927-11 1-124-903-11 1-126-233-11 1-162-318-11 1-162-117-00	ELECT ELECT CERAMIC	4.7MF 1MF 22MF 0.001MF 100PF	20% 20% 20% 10% 10%	50V 50V 25V 500V 500V
C603 C604 C605 C606 C607	1-125-318-00 1-124-122-11 1-124-667-11 1-162-318-11 1-124-120-11	ELECT CERAMIC	220MF 100MF 10MF 0.001MF 220MF	20% 20% 20% 10% 20%	400V 50V 100V 500V 25V	C906 C908 C909 C910 C1200	1-124-910-11 1-124-910-11 1-124-903-11 1-137-393-91 1-136-165-00	ELECT ELECT FILM	47MF 47MF 1MF 0.01MF 0.1MF	20% 20% 20% 5% 5%	50V 50V 50V 100V 50V
C608 C611 C612 C613 C614	0-551-803-10 1-102-228-00 1-104-799-11 1-124-347-00 1-126-804-11	ELECT ELECT	470PF 22MF 100MF 100MF	10% 20% 20% 20%	500V 100V 160V 25V	C1201 C1202 C1203 C1204 C1205	1-136-165-00 1-136-165-00 1-136-169-00 1-136-169-00 1-101-005-00	FILM FILM FILM	0.1MF 0.1MF 0.22MF 0.22MF 0.022MF	5% 5% 5% 5%	50V 50V 50V 50V 50V
C615 C616 C617 C618 C619	1-126-376-11 1-128-386-11 1-124-556-11 1-136-165-00 1-102-228-00	ELECT ELECT FILM	470MF 1000MF 2200MF 0.1MF 470PF	20% 20% 20% 5% 10%	25V 25V 16V 50V 500V	C1206 C1207 C1208 C1209 C1210	1-101-005-00 1-126-101-11 1-124-927-11 1-124-927-11 1-124-925-11	ELECT ELECT	0.022MF 100MF 4.7MF 4.7MF 2.2MF	20% 20% 20% 20% 20%	50V 16V 50V 50V 50V
C620 C621 C622 C623 C624	1-102-228-00 1-136-165-00 1-124-790-11 1-124-120-11 1-136-165-00	FILM ELECT ELECT	470PF 0.1MF 0.47MF 220MF 0.1MF	10% 5% 20% 20% 5%	500V 50V 100V 25V 50V	C1211 C1212 C1213 C1214 C1215	1-124-925-11 1-137-387-11 1-137-387-11 1-126-101-11 1-136-173-00	FILM FILM ELECT	2.2MF 0.001MF 0.001MF 100MF 0.47MF	20% 5% 5% 20% 5%	50V 100V 100V 16V 50V
C625 C626 C627 C628 C629	1-124-910-11 1-124-120-11 1-124-120-11 1-124-907-11 1-126-800-51	ELECT ELECT	47MF 220MF 220MF 10MF 2200MF	20% 20% 20% 20% 20%	50V 25V 25V 50V 35V	C1216 C1217 C1218	1-137-366-11 1-137-366-11 1-124-120-11 < CO	FILM	0.0022MF 0.0022MF 220MF	5% 5% 20%	50V 50V 16V
C630 C631	1-126-800-51 1-124-916-11	ELECT	2200MF 22MF	20% 20%	35V 50V	CN600 A	1-508-786-00 1-508-765-00	PIN, CONNEC	TOR (5MM PI	PCH) 2P	ener i e e e e e e e e e e e e e e e e e e





REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
CNOUL	*1-695-292-11 *1-580-798-11	PIN, CONNECTOR (POWER) CONNECTOR PIN (DY) 6P	17.00		< FE	RRITE BEAD >	
CN803 CN804 CN807 CN901 CN902	1-695-915-11 1-508-768-00 1-568-878-51	TAB (CONTACT) PIN, CONNECTOR (5MM PITC) PIN, CONNECTOR 3P	H) 6P	FB600 FB601 FB602 FB604 FB605	1-410-397-21 1-410-397-21 1-410-396-41	FERRITE BEAD INDUCTOR 1.1UH FERRITE BEAD INDUCTOR 1.1UH FERRITE BEAD INDUCTOR 1.1UH FERRITE BEAD INDUCTOR 0.45UH FERRITE BEAD INDUCTOR 0.45UH	
CN1200	*1-568-879-11	PIN, CONNECTOR 4P	301	FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
CN1201	*1-568-878-51	PIN, CONNECTOR 3P			< IC	>	
	< DI	ODE >		IC500 IC600	8-759-192-71 8-759-183-88	TC CMD_C6700	
D500 D502 D503 D504 D505	8-719-109-85 8-719-979-85 8-719-979-85 8-719-901-33	DIODE RD5.1ESB2 DIODE EGP20G DIODE EGP20G DIODE 1SS133		IC601 A IC602 IC603	8-749-924-93 8-749-923-26 8-759-013-06	IC TLP621GR IC SE135N-LF12 IC MC7805CT	
D506 D507 D600 D601	8-719-901-33 8-719-109-85 8-719-510-53	PLUG, CONNECTOR 4P CONNECTOR, BOARD TO BOARD PIN, CONNECTOR 3P PIN, CONNECTOR 3P ODE > DIODE RD5.1ESB2 DIODE EGP20G DIODE EGP20G DIODE 1SS133 DIODE MTZJ-3.6A DIODE 1SS133 DIODE RD5.1ESB2 DIODE RD5.1ESB2 DIODE RD6.8ESB2 DIODE EM1-V1 DIODE RD6.8ESB2		IC604 IC605 IC606 IC800 IC1200	8-759-701-79		
D603	8-719-109-97	DIODE RD6.8ESB2		IC1201	8-759-502-21	IC TDA2822M	
D604 D605	8-719-046-75 8-719-312-61	DIODE EU-1-V1 DIODE EU-1Z			< COI	L >	
D606 D607 D608	8-719-312-61 8-719-046-78 8-719-046-75	DIODE EU-1Z DIODE EG-1Z-V1 DIODE EU-1-V1		L502 L503 L609 L611	1-412-519-11 1-412-519-11 1-412-533-21 1-412-533-21	INDUCTOR 3.3UH INDUCTOR 47UH	
D609 D610 D611	8-719-301-64 8-719-046-74 8-719-302-43	DIODE RU4DS DIODE AU-01Z-V1 DIODE RL1Z		L612	1-414-415-11	INDUCTOR OUH	
D612 D613	8-719-046-76 8-719-302-43	DIODE RU-3YX-V1 DIODE EL1Z		L800 L801 L802	1-459-111-00	INDUCTOR OUH COIL, HCC DUST CORE 3.9MMH COIL, DRAM CORE (CDI) COIL, WITH CORE	
D614 D615 D616 D617 D618	8-719-302-43 8-719-046-75 8-719-110-03 8-719-901-33	DIODE EM1-V1 DIODE EU-1-V1 DIODE EU-1Z DIODE EU-1Z DIODE EU-1Z DIODE EU-1Z DIODE EU-1Z DIODE EU-1V1 DIODE EU-1-V1 DIODE EU-1-V1 DIODE RU4DS DIODE AU-01Z-V1 DIODE RL1Z DIODE RL1Z DIODE RL1Z DIODE EL1Z DIODE EL1Z DIODE EL1Z DIODE EU-1-V1 DIODE EU-1-V1 DIODE EU-1-V1 DIODE BU-1-V1 DIODE BU-1-V1 DIODE ISS133 DIODE 1SS133 DIODE 1SS133		L803 L804 L805	1-420-872-00 1-459-907-11 1-412-552-31	COIL, AIR CORE COIL, HORIZONTAL LINEARITY INDUCTOR 2.2MMH	
D619	8-719-901-33 8-719-901-33	DIODE 1SS133 DIODE 1SS133		L806	1-412-519-11 1-412-533-21	INDUCTOR 3.3UH INDUCTOR 47UH	
D620 D622 D625	8-719-921-69	DIODE MTZJ-9.1				LINK >	
D626	8-719-046-74	DIODE 1SS133 DIODE AU-01Z-V1		PS602-A	1-532-686-21*	LINK, IC 2.7A (ICP-F75) -LINK, IC 2.7A (ICP-F75) -LINK, IC 2.7A (ICP-F75)	
D800 D801 D802 D803 D807	8-719-901-33 8-719-901-33 8-719-908-03	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE GPO8D	-	12002 277	1-532-605-21	LINK, IC 2.7A (ICP-F75) LINK, IC 0.4A (ICP-F10) NSISTOR >	
D808 D809 D810 D812 D813	8-719-302-43 8-719-945-80	DIODE GP08D DIODE RGP02-20EL-6394 DIODE EL1Z DIODE ERC06-15S		Q501 Q502 Q503 Q601 Q602	8-729-173-38 8-729-900-89 8-729-025-05	TRANSISTOR JC501-Q-AMMO TRANSISTOR 2SA733-K TRANSISTOR DTC144ES TRANSISTOR 2SC3852A-O TRANSISTOR 2SA1667	
D814 D815 D817 D902 D903	8-719-900-26 8-719-908-03 8-719-109-89 8-719-921-69	DIODE RD5.6ESB2 DIODE MTZJ-9.1		Q603 Q604 Q605 Q606 Q607	8-729-024-35 8-729-119-78 8-729-900-65	TRANSISTOR 2SC2808STP-R TRANSISTOR 2SC2808STP-R TRANSISTOR JC501-Q-AMMO TRANSISTOR DTA144ES TRANSISTOR JC501-Q-AMMO	
D904 D905 D906	8-719-921-69 8-719-921-69	DIODE MTZJ-9.1 DIODE MTZJ-9.1 DIODE MTZJ-9.1 DIODE MTZJ-9.1		Q800 Q801 Q802 Q803 Q805	8-729-017-06 8-729-016-32 8-729-119-80	TRANSISTOR JC501-Q-AMMO TRANSISTOR 2SC4793 TRANSISTOR 2SC4927-01 TRANSISTOR 2SC2688-LK TRANSISTOR DTC144ES	

The components identified by shading and marked \hat{m} are critical forsafety.

Replace only with the part number specified.

only with the part number

REF.NO.	PART NO.	DESCRIPTIO	N	REMARK	REF.NO.	PART NO.	DESCRIPTIO	N	REMARK
Q1200	8-729-119-78	TRANSISTOR JO	501-Q-AMMO		R643 R644	1-249-423-11 1-260-087-11	CARBON CARBON	3.3K 5% 100 5%	1/4W 1/2W
	< RES	SISTOR >			R645	1-249-422-11	CARBON	2.7K 5%	1/4W
R500 R502 R503 R504 R505	1-215-457-00 1-249-421-11 1-249-429-11 1-215-459-00 1-249-382-11	CARBON CARBON METAL	33K 1% 2.2K 5% 10K 5% 39K 1% 1.2 5%	1/4W 1/4W 1/4W 1/4W 1/4W F	R646 R647 R648 R800 R801	1-249-377-11 1-202-933-61 1-216-397-11 1-249-421-11 1-249-429-11	CARBON FUSIBLE METAL OXIDE CARBON CARBON	0.47 5% 0.1 10% 4.7 5% 2.2K 5% 10K 5%	1/4W F 1/2W F 3W F 1/4W
R506 R507 R508 R509 R510	1-215-447-00 1-215-887-00 1-216-371-00 1-249-443-11 1-249-443-11	METAL OXIDE METAL OXIDE CARBON CARBON	12K 1% 150 5% 1.5 5% 0.47 5% 0.47 5%	1/4W 2W F 2W F 1/4W F 1/4W F	R802 R803 R804 R805 R812	1-249-431-11 1-249-423-11 1-249-430-11 1-249-425-11 1-249-421-11	CARBON CARBON CARBON CARBON CARBON	15K 5% 3.3K 5% 12K 5% 4.7K 5% 2.2K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
R517 R518 R520 R521 R522	1-215-427-00 1-215-427-00 1-215-457-00 1-215-461-00 1-249-433-11	METAL METAL METAL	1.8K 1% 1.8K 1% 33K 1% 47K 1% 22K 5%	1/4W 1/4W 1/4W 1/4W	R813 R814 R816 R817 R818	1-215-867-00 1-249-411-11 1-216-481-21 1-216-481-21 1-215-882-00	METAL OXIDE CARBON METAL OXIDE METAL OXIDE METAL OXIDE	470 5% 330 5% 1.2K 5% 1.2K 5% 22 5%	1W F 1/4W 3W F 3W F 2W F
R523 R524 R525 R526 R527	1-249-433-11 1-249-425-11 1-249-425-11 1-249-421-11 1-215-430-00	CARBON CARBON CARBON	22K 5% 4.7K 5% 4.7K 5% 2.2K 5% 2.4K 1%	1/4W 1/4W 1/4W 1/4W 1/4W	R819 R820 R821 R822 R824	1-216-345-11 1-249-403-11 1-215-884-11 1-215-868-00 1-249-420-11	CARBON METAL OXIDE METAL OXIDE	0.47 5% 68 5% 47 5% 680 5% 1.8K 5%	1W F 1/4W 2W F 1W F 1/4W
R600 R601 R603 R604 R605	1-216-490-11 1-249-417-11 1-249-429-11 1-249-420-11 1-216-362-11	CARBON CARBON CARBON	39K 5% 1K 5% 10K 5% 1.8K 5% 0.27 5%	3W F 1/4W 1/4W 1/4W 2W F	R826 R827 R828 R829 R830	1-247-752-11 1-249-425-11 1-249-427-11 1-249-493-11 1-217-778-11	CARBON CARBON	1K 5% 4.7K 5% 6.8K 5% 56K 5% 1K 5%	1/2W 1/4W 1/4W 1/2W 1W F
R607 R608 R610 R611 R612	1-216-421-11 1-216-365-00 1-249-417-11 1-215-859-00 1-249-428-11	METAL OXIDE CARBON METAL OXIDE	12 5% 0.47 5% 1K 5% 22 5% 8.2K 5%	1W F 2W F 1/4W 1W F 1/4W	R833 R836 R837 R840 R841	1-249-421-11 1-249-439-11 1-249-431-11 1-247-807-31 1-249-418-11	CARBON CARBON CARBON	2.2K 5% 68K 5% 15K 5% 100 5% 1.2K 5%	1/4W F 1/4W 1/4W 1/4W 1/4W
R613 R614 R615 R616 R617	1-249-417-11 1-249-429-11 1-249-435-11 1-215-477-00 1-215-901-00	CARBON CARBON METAL	1K 5% 10K 5% 33K 5% 220K 1% 33K 5%	1/4W 1/4W 1/4W 1/4W 2W F	R842 R843 R846 R847 R848	1-249-441-11 1-247-893-11 1-249-441-11 1-247-891-00 1-247-887-00	CARBON CARBON CARBON	100K 5% 390K 5% 100K 5% 330K 5% 220K 5%	1/4W 1/4W 1/4W 1/4W 1/4W
R618 R619 R620 R621 R622	1-249-429-11 1-216-425-21 1-247-895-00 1-216-425-21 1-249-437-11	METAL OXIDE CARBON METAL OXIDE	10K 5% 56 5% 470K 5% 56 5% 47K 5%	1/4W 1W F 1/4W 1W F 1/4W	R849 R850 R851 R852 R901	1-249-429-11 1-249-425-11 1-247-764-11 1-249-432-11 1-202-539-00	CARBON CARBON CARBON	10K 5% 4.7K 5% 10K 5% 18K 5% 39 10%	1/4W 1/4W 1/2W F 1/4W 1/2W
R623 R624 R625 R626 R628	1-249-429-11 1-249-405-11 1-249-434-11 1-249-430-11 1-249-415-11	CARBON CARBON CARBON	10K 5% 100 5% 27K 5% 12K 5% 680 5%	1/4W 1/4W F 1/4W 1/4W 1/4W F	R902 R907 R916 R917 R1200	1-202-539-00 1-247-804-11 1-249-397-11 1-249-397-11 1-249-429-11	CARBON CARBON	39 10% 75 5% 22 5% 22 5% 10K 5%	1/2W 1/4W 1/4W 1/4W 1/4W
R630	1-244-945-91 1-218-265-11 1-205-949-11 1-249-397-11 1-249-437-11	METAL GLAZE WIREWOUND CARBON	8.2M 5%	1/2W 1W 10W 1/4W F 1/4W	R1201 R1202 R1203 R1204 R1205	1-249-434-11 1-249-393-11 1-249-421-11 1-249-421-11 1-249-428-11	CARBON CARBON CARBON	27K 5% 10 5% 2.2K 5% 2.2K 5% 8.2K 5%	1/4W 1/4W F 1/4W 1/4W 1/4W
R636 R637 R638 R639 R640	1-249-417-11 1-249-409-11 1-249-433-11 1-249-429-11 1-216-381-11	CARBON CARBON	1K 5% 220 5% 22K 5% 10K 5% 0.22 5%		R1206 R1207 R1208 R1209 R1210	1-249-428-11 1-249-417-11 1-212-849-00 1-212-849-00 1-249-417-11	CARBON FUSIBLE FUSIBLE	8.2K 5% 1K 5% 4.7 5% 4.7 5% 1K 5%	1/4W 1/4W 1/4W F 1/4W F 1/4W
R641 R642	1-216-381-11 1-205-949-11	METAL OXIDE	0.22 5% 1.8 5%	3W F 10W	R1211 R1212	1-249-424-11 1-249-424-11		3.9K 5% 3.9K 5%	



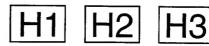
shading and marked A are critical for safety.

Replace only with the part number specified.

REF.NO.	PART NO.	DESCRIPT	TION .		REMARK	REF.NO.	PART NO.	DESCRIPT	ION		REMARK
R1213	1-249-425-11	CARBON	4.7K 5%	1/4W			< CO	IL >			
	< VAI	RIABLE RESIST	OR >			L1702	1-408-418-00	INDUCTOR	56UH		
RV301	1-238-552-11	RES, ADJ, C	ARBON 470K				< TR	ANSISTOR >			
	< REI	AY >				Q1701 01702	8-729-119-78 8-729-173-38	TRANSISTOR	2SC2785-HF	E	
RY600 A	1-515-720-31	RELAY	The second secon		Annual mental and the second of the second o	Q1703 Q1704	8-729-017-05 8-729-119-78	TRANSISTOR	2SA1837	P	
	< SPA	ARK GAP >				Q1705	8-729-017-06	TRANSISTOR	2SC4793	B	
SG801	1-519-422-11	GAP, SPARK				Q1706 Q1707	8-729-119-78 8-729-140-96			E	
		INSFORMER >				Q1708 Q1709	8-729-901-59 8-729-255-12	TRANSISTOR	BF199		
LF601 A	1-421-776-11 1-421-776-11	LFT			1 2.54.95	_		SISTOR >			
T800	1-426-805-11 1-424-545-11	TRANSFORMER	. FERRITE (F	PMT)	r remains the continue appropriate the legal sec	R1701	1-247-807-31	CARBON	100 5	% 1/4W	
	1-453-169-11		ASSY, FLYBA	ick (ux-	1604A2)	R1702 R1703	1-249-420-11 1-247-807-31	CARBON	1.8K 5	8 1/4W	
T804	1-437-090-00					R1704 R1705	1-249-420-11 1-247-736-11		1.8K 59		
		RMISTOR >			ng managasah 483 k maladigi di Saksangangga ng maladi	R1706	1-249-414-11		560 59		
Tallion 18th Till St. Jan St. American	▲ 1-809-827-11	The second second second second second second	eteromente en contrata de la companya del companya de la companya de la companya del companya de la companya del la companya del la companya de la companya del la companya de la companya	The same of the same of the same of	and a survey of his hardest and a survey of	R1707 R1709	1-249-412-11 1-249-416-11	CARBON	390 59 820 59	6 1/4W	
******				******	*******	R1710 R1711	1-249-385-11 1-249-432-11		2.2 59 18K 59		F
	*A-1644-028-A	********				R1712	1-249-435-11		33K 59		
	*4-368-683-21	SPRING, TRA	NSISTOR			R1713 R1714 R1715	1-249-438-11 1-249-429-11 1-216-476-11	CARBON	56K 59	6 1/4W	
	< CAP	ACITOR >				R1716	1-249-417-11		180 59 1K 59		P P
C1701 C1702	1-124-119-00 1-101-880-00		330MF 47PF	20% 5%	16V 50V	R1717 R1718	1-249-432-11 1-249-410-11		18K 59		
C1703 C1704	1-102-115-00 1-161-830-00	CERAMIC	560PF 0.0047MF	10%	50V 500V	R1719 R1720	1-249-419-11 1-249-441-11	CARBON	1.5K 59 100K 59	6 1/4W	
C1705	1-124-120-11		220MF	20%	16V	R1721	1-249-414-11		560 59	_,,	
C1706 C1707	1-123-935-00 1-124-907-11		33MF 10MF	20% 20%	160V 50V	R1722 R1723	1-249-385-11 1-249-429-11		2.2 59 10K 59		F
C1708 C1709	1-101-006-00 1-108-704-11	CERAMIC	0.047MF 0.1MF	10%	50V 200V	R1724 R1725	1-249-436-11 1-249-417-11	CARBON	39K 59	1/4W	
C1710	1-136-207-11		0.047MF	10%	250V	R1726	1-249-411-11		330 5%		
C1711 C1712	1-162-318-11 1-124-799-11		0.001MF 2.2MF	10% 20%	500V 160V	R1727 R1729	1-249-402-11 1-216-451-11		56 59 120 59	_,	F F
C1713 C1714	1-162-318-11 1-136-207-11	FILM	0.001MF 0.047MF	10% 10%	500V 250V	R1731 R1732	1-249-420-11 1-249-426-11	CARBON	1.8K 5% 5.6K 5%	1/4W	-
C1716	1-124-907-11	ELECT	10MF	20%	50V	R1734	1-249-419-11	CARBON	1.5K 5%	1/4W	
C1718 C1719	1-124-120-11 1-124-927-11		220MF 4.7MF	20% 20%	16V 50V	*******	********	*******	********	******	*****
	< CON	NECTOR >					*A-1646-057-A	H1 BOARD, CO			
CN1819	*1-568-882-51	PIN, CONNEC	TOR 7P				< CAP	ACITOR >			
	< DIO	DE >				C900	1-101-810-00		100PF	5%	501V
D1701 D1702	8-719-901-33					C901 C902	1-101-810-00 1-136-205-11	FILM	100PF 0.022MF	5% 10%	50N 40N
D1703 D1704	8-719-901-33 8-719-901-33	DIODE 1SS13	3			C903 C907	1-136-205-11 1-124-903-11		0.022MF 1MF	10% 20%	40N 501
D1704	8-719-982-37 8-719-982-37						< CON	NECTOR >			
D1706 D1707	8-719-901-33 8-719-901-33					CN900	1-568-678-11	TERMINAL BLO	CK, S 3P		
22.01	8-719-901-33	דרספד שמטדמ	,								

The components identified by shading and marked 🕭 are critical for safety.

Replace only with the part number specified.



										1 12		1 10
REF.NO.	PART NO.	DESCRIPT	TION			REMARK	REF.NO.	PART NO.	DESCRIPTI	ON		REMARK
	< JA	CK >							LLANEOUS			
J900	1-562-837-11	JACK						••••	******			
	< CO	IL >					A A	1-402-747-21 8-451-313-61	DEFLECTION 1	OLK Y29FX	A .	A TO BE MANAGEMENT OF THE SAME
L900	1-408-409-00	TNDHCTOR	100	ш				1-692-979-11	SPEAKER 7.5	x 13CM		
L901	1-408-409-00		100				A	1-751-680-11	CORD POWER		2901A/X	
							∆	1-590-460-11		WITH CONN	ECTOR)	
	< RE	SISTOR >					<u> </u>	1 500 500 11	(KV-X2900I	3/X2901B/X	2903E/Z	.2901K)
R905	1-247-804-11	CARBON	75	5%	1/4W		/AX	1-590-762-11	CORD POWER			(29020)
R906	1-247-804-11		75	5%	1/4W		al may foliate months on the parameters in		9		A. Separate artists	or various transfer or age, is
R909 R910	1-249-437-11 1-249-437-11		47K	5%	1/4W		V901 ∆	8-733-831-05	PICTURE TUBE	SD-191 (1	168JYL6	1 X)
R915	1-249-397-11		47K 22	5% 5%	1/4W 1/4W		******	******	******	*****		

******	***********		******	*****	*******	******		ACCES	SORIES AND PA	CKING MATE	RIALS	•
	*1-652-269-11	#2 BOARD						4-202-699-11	MANUAL INSTR	RUCTION (GE		
	< CAI	PACITOR >						4-202-699-41	MANUAL INSTR	TICTION (TO	1 (184 7.74	OUTCH/GREEK)
2004	1 101 010 11							4-202-699-51	MANUAL INSTR	UCTION (FE	RENCH	
C904 C905	1-124-910-11 1-124-907-11		47MF 10MF		20% 20%	50V 50V		4-202-699-61	MANUAL INSTR	UCTION (EN	(GLISH)	
6703	1-121-307-11	BUBCI	TOME		40%	304		4-202-699-71 4-202-699-81	MANUAL INSTR	UCTION (SE	ANISH)	ANTOU/
		INECTOR >						1 102 055-01			FRENCH	ANISH/ I/NORWEGIAN) SH/FINNISH)
CN907	1-564-509-11		CTOR 6P					4-202-699-91	MANUAL INSTR	UCTION (HU	NGARIA	N/CZECH/ SH/RUSSIAN)
	< DIC	DDE >										(BULGARIAN)
D901	8-719-948-60 4-202-707-01							*1-692-979-11 *1-692-979-11	BAG, PROTECT	ION		
	< IC	>						*1-751-680-11 *1-590-762-11	CUSHION (LOW	ER) (ASSY)		
IC900	8-741-790-51	TC CRY1700_	51					T. Tildom				
		SISTOR >	-						E COMMANDER			
R900	1-249-409-11	CADRON	220	5%	1 / 457		ļ	1-467-706-11	COMMANDER (R	M833)		
R908	1-249-401-11		47	5%	1/4W 1/4W		*******	******	******	******	*****	*******
******	*******	******	*****	*****	*****	******						
	*1-652-270-11	H3 BOARD										
	< RES	ISTOR >										
R911	1-249-423-11	CARRON	3.3K	50	1/4W							
R912	1-249-429-11		10K	5%	1/4W							
R913	1-249-423-11	CARBON	3.3K		1/4W							
R914	1-249-429-11		10K	5%	1/4W							
	< SWI	TCH >				-						
S900 S901	1-692-979-11 1-692-979-11	SWITCH, TACT										
S902	1-692-979-11											

SERVICE MANUAL

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2901D	RM-833	AEP	SCC-G77B-A	KV-X2903E	RM-833	Spanish	SCC-G82B-A
KV-X2901A	RM-833	Italian	SCC-G81B-A	KV-X2902L	RM-833	IRISH	SCC-G83B-A
KV-X2900B	RM-833	French	SCC-G85B-A	KV-X2902L	RM-833	UK	SCC-G87B-A
KV-X2901B	RM-833	French	SCC-G84B-A	KV-X2901K	RM-833	OIRT	SCC-G86A-A

CORRECTION - 1

SUBJECT: CORRECTED SPECIFICATIONS

File this correction with the service manual

(See page 2)

	Incorrect											
TEM MODEL	Television System	Stereo System	Channel Coverage	Color System								
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):51-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)								
Italian	B/G/H, D/K	GERMAN Stereo	ITALIA VHF.A-H2 (C) UHF. 21-69 PAL BIGAN VHF.E2-E12 UHF.E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 DIX VHF.R01-R12 UHF.R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)								
French	B/G/H, D/K L, I	GERMAN Stereo	L VHF:F02-F10 UHF:F21-F60 CABLE:B-O BIGM VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 I UHF:B21-B69	PAL, SECAM NTSC4 43, NTSC3.58 (VIDEO IN)								
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-E9 DK VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)								
irish	1	NICAM Stereo	VHF A-C, D-J, VHF 21-69 CABLE CHANNELS S1-S20 HYPERBAND S21-S41	PAL, SECAM NTSC4.43, NTSC3.56 (VIDEO IN)								
uk	1	NICAM Stereo	UHF : 821-869	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)								
OIRT	B/G/H, D/K	ĢERMAN Stereo	B'G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)								

Correct

HEM MODEL	relevision system	Stereo System	Channel Coverage	Color System
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):51:S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-89 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Italian	B/G/H	GERMAN Stereo	ITALIA VHF:A-H2 (C) UHF: 21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
French	B/G/H, L, I	KV-X2501B GERMAN Stereo KV-X2500B GERMAN/NICAM Stereo	L VHF-F02-F10 UHF-F21-F60 CABLE-B-G BGM VHF-E2-E12 UHF-E21-E89 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 TALIA VHF-A1-E/C) UHF-21-69 I UHF-821-669	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)
Spanish	B/G/H,	GERMAN/NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69	PAL NTSC4.43, NTSC3.56 (VIDEO IN)
insh	1	NICAM Stereo	VHF A-C, D-J, UHF 21-69 CABLE CHANNELS S1-S20 (C) HYPERBAND S21-S41	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
uk	ı	NICAM Stereo	UHF: 821-869	PAL NTSC4.43, NTSC3.58 (VIDEO IN)
OIRT	B/G/H, D/K	GERMAN Stereo	B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC4.43, NTSC3.58 (VIDEO IN)



SONY **SERVICE MANUAL**

BE-3B CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-X2901D	RM-833	AEP	SCC-G77B-A	KV-X2903	Е пм-833	Spanish	SCC-G82B-A
KV-X2901A	RM-833	Italian	SCC-G81B-A	KV-X2902	RM-833	IRISH	SCC-G83B-A
KV-X2900B	RM-833	French	SCC-G85B-A	KV-X2902	U RM-833	UK	SCC-G87B-A
KV-X2901B	RM-833	French	SCC-G84B-A	KV-X2901	K RM-833	OIRT	SCC-G86A-A

CORRECTION - 2

SUBJECT: CORRECTED PART NUMBERS

File this correction with the service manual

INTRODUCTION: 1. ALL MODELS.

ALL MODELS.
 KV-X2901D/X2901A/X2900B/X2901B/X2903E/X290IK only.

:Indicates corrected portion.

SECTION 6 EXPLODED VIEWS

6-2.PICTURE TUBE (See page 58)

Item 1

INCORRECT				CORRECT			
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
53	4-386-710-11	CATCHER, PUSH		53	4-392-036-11	CATCHER, PUSH	

SECTION 6 EXPLODED VIEWS, SECTION 7 ELECTRICAL PARTS LIST

6-1 CHASSIS (See page 57), F1 BOARD (See page 59), H2/H3 boards (See page 71)

Item 2

INCORRECT			CORRECT				
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-652-270-11	H3 BOARD			*A-1646-059-A	H3 BOARD, COMPLETE	
	*1-652-269-11	H2 BOARD			*A-1646-058-A	H2 BOARD, COMPLETE	
	*1-652-271-11	F1 BOARD			*A-1624-029-A	F1 BOARD, COMPLETE	

SECTION 7 ELECTRICAL PARTS LIST

A BOARD (See page 61)

Item 3

INCORRECT			CORRECT				
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
CF101 CF103 CF106	0-550-400-00 0-550-808-10 0-550-809-10			CF101 CF103 CF106	1-760-154-21 1-760-106-21 1-760-107-21	SFE 5.5MC2	



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